# Inspector General

United States
Department of Defense



Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor

| maintaining the data needed, and c including suggestions for reducing                      | lection of information is estimated to<br>ompleting and reviewing the collect<br>this burden, to Washington Headqu<br>uld be aware that notwithstanding an<br>DMB control number. | ion of information. Send comment<br>arters Services, Directorate for Info | s regarding this burden estimate<br>ormation Operations and Reports | or any other aspect of the s, 1215 Jefferson Davis | nis collection of information,<br>Highway, Suite 1204, Arlington |
|--|---|---|---|--|--|
| 1. REPORT DATE <b>08 DEC 2009</b>  |   | 2. REPORT TYPE  |   | 3. DATES COVE<br>00-00-2009                        | red<br>To 00-00-2009   |
| 4. TITLE AND SUBTITLE  |   |   |   | 5a. CONTRACT                                       | NUMBER   |
| Army's Management of the Operations and Support Phas<br>Acquisition Process for Body Armor |   |   | e ofthe   | 5b. GRANT NUMBER                                   |  |
| Acquisition Frocess for Body Armor   |   | 5c. PROGRAM ELEMENT NUMBER  |   |  |  |
| 6. AUTHOR(S)   |   |   |   | 5d. PROJECT NUMBER                                 |  |
|  |   |   | 5e. TASK NUMBER   |  |  |
|  |   |   |   | 5f. WORK UNIT                                      | NUMBER   |
|  | zation name(s) and an<br>ense Inspector Geno<br>,22202-4704   | ` /   | y Drive (Room   | 8. PERFORMING<br>REPORT NUMB                       | G ORGANIZATION<br>ER   |
| 9. SPONSORING/MONITO   | RING AGENCY NAME(S) A   | AND ADDRESS(ES)   |   | 10. SPONSOR/MONITOR'S ACRONYM(S)                   |  |
|  |   |   |   | 11. SPONSOR/M<br>NUMBER(S)                         | ONITOR'S REPORT  |
| 12. DISTRIBUTION/AVAIL Approved for publ   | ABILITY STATEMENT ic release; distributi  | ion unlimited   |   |  |  |
| 13. SUPPLEMENTARY NO   | OTES  |   |   |  |  |
| 14. ABSTRACT   |   |   |   |  |  |
| 15. SUBJECT TERMS  |   |   |   |  |  |
| 16. SECURITY CLASSIFICATION OF:  |   |   | 17. LIMITATION OF ABSTRACT  | 18. NUMBER<br>OF PAGES                             | 19a. NAME OF<br>RESPONSIBLE PERSON                               |
| a. REPORT <b>unclassified</b>  | b. ABSTRACT <b>unclassified</b>   | c. THIS PAGE<br>unclassified  | Same as<br>Report (SAR)   | 77   |  |

**Report Documentation Page** 

Form Approved OMB No. 0704-0188

#### **Additional Copies**

To obtain additional copies of this report, visit the Web site of the Department of Defense Inspector General at <a href="http://www.dodig.mil/audit/reports">http://www.dodig.mil/audit/reports</a> or contact the Secondary Reports Distribution Unit at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932.

#### **Suggestions for Audits**

To suggest or request audits, contact the Office of the Deputy Inspector General for Auditing by phone (703) 604-9142 (DSN 664-9142), by fax (703) 604-8932, or by mail:

ODIG-AUD (ATTN: Audit Suggestions)
Department of Defense Inspector General
400 Army Navy Drive (Room 801)
Arlington, VA 22202-4704



#### To report fraud, waste, mismanagement, and abuse of authority.

Send written complaints to: Defense Hotline, The Pentagon, Washington, DC 20301-1900 Phone: 800.424.9098 e-mail: hotline@dodig.mil www.dodig.mil/hotline

### **Acronyms and Abbreviations**

ARCENT U.S. Army Central

CMO Central Management Office

DRMO Defense Reutilization Marketing Office
DRMS Defense Reutilization Marketing Service
ESAPI Enhanced Small Arms Protective Insert

ESBI Enhanced Side Ballistic Insert

FRAGO Fragmentary Order
IBA Interceptor Body Armor
IOTV Improved Outer Tactical Vest
MAM Maintenance Advisory Message

OCIE Organizational Clothing and Individual Equipment

OTV Outer Tactical Vest

PEO Program Executive Office(r)
SAPI Small Arms Protective Insert



## INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202-2884

December 8, 2009

#### MEMORANDUM FOR DISTRIBUTION

SUBJECT: Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor (Report No. D-2010-027)

We are providing this report for review and comment. We considered management comments on a draft of this report when preparing the final report.

DOD Directive 7650.3 requires that all recommendations be resolved promptly. U.S. Army Central comments were not fully responsive. We request additional comments on Recommendation A.3. In addition, Program Executive Officer Soldier comments were partially responsive. We request additional comments on Recommendation B.1.f. We redirected and revised Recommendation A.1 to Program Executive Officer Soldier based on comments from U.S. Army Deputy Chief of Staff for Logistics. Therefore, we request that U.S. Army Central and Program Executive Officer Soldier comment on the recommendations by January 8, 2010.

If possible, please send a .pdf file containing your comments to <a href="mailto:audjsao@dodig.mil">audjsao@dodig.mil</a>. Copies of the management comments must contain the actual signature of the authorizing official. We are unable to accept the /Signed/ symbol in place of the actual signature. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-8905 (DSN 664-8905).

Paul J. Granetto

Principal Assistant Inspector General

fault Branet

for Auditing

#### DISTRIBUTION:

COMMANDER, U.S. CENTRAL COMMAND
COMMANDER, U.S. ARMY CENTRAL
COMMANDER, ARMY MATERIEL COMMAND
DEPUTY CHIEF OF STAFF FOR LOGISTICS, DEPARTMENT OF THE ARMY
COMMANDER, U.S. ARMY INSTALLATION MANAGEMENT COMMAND
COMMANDER, U.S. ARMY TACOM LIFE CYCLE MANAGEMENT COMMAND
PROGRAM EXECUTIVE OFFICER SOLDIER
ADJUTANT GENERAL OF THE U.S. ARMY
DIRECTOR, DEFENSE LOGISTICS AGENCY
DIRECTOR, DEFENSE REUTILIZATION AND MARKETING SERVICE
AUDITOR GENERAL, DEPARTMENT OF THE ARMY



## Results in Brief: Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor

#### What We Did

We determined whether the DOD was effectively managing the operations and support phase of the acquisition process for body armor components. Specifically, we reviewed the storage, shipping, maintenance, repair, and inspection of DOD body armor components at 14 sites. We also reviewed the disposal of body armor components at two locations. This report is the first in a series of reports on body armor life cycle management and focuses on the U.S. Army's sustainment and disposal processes.

#### What We Found

The Army should improve the management of the operations and support phase of the acquisition process for Interceptor Body Armor (IBA). Army officials were not properly storing (6 sites), shipping (3 sites), and maintaining (2 sites) the Enhanced Small Arms Protective Inserts (ESAPI). Army officials were also not properly maintaining the IBA vests (3 sites) and did not develop repair guidance for the Improved Outer Tactical Vest and ESAPI.

The Army's visual and automated inspection process for ballistic plates should be improved. Army officials were not adequately identifying ESAPI with external material failures (6 sites) or ESAPI specified for return (2 sites) in accordance with guidance, and they were not x-raying ballistic plates as senior Army officials believed. Having a thorough, updated, standardized, and published inspection process should provide increased assurance that soldiers engaged in combat continue to have the required level of ballistic protection.

Defense Reutilization and Marketing Service (DRMS) officials at two locations disposed of potentially serviceable IBA because of noncompliance and limitations in disposition guidance. As a result of the audit, DRMS officials returned IBA components to the Army worth

approximately \$7,024,083 from April through June 2009.

We identified internal control weaknesses with the Army's IBA sustainment and disposal processes.

#### We Recommend

We recommend that Program Executive Officer (PEO) Soldier, in coordination with Army and Defense Logistics Agency officials, update and disseminate guidance for the maintenance and disposition of IBA. We also recommend that the Army direct all facilities responsible for handling IBA to comply with the guidance.

We recommend that PEO Soldier complete the required testing and analysis of the Non Destructive Testing Equipment and provide a recommendation to the Army on whether they should require soldiers' ballistic plates to be x-rayed with the equipment.

We recommend that DRMS update the DRMS IBA disposition bulletin based on the updated Army IBA disposition guidance and require DRMS officials to comply with the guidance.

## Management Comments and Our Responses

We commend the Army and DRMS for working collaboratively and taking actions to improve IBA life cycle management and ensuring that soldiers have the required level of ballistic protection. We revised and redirected Recommendation A.1 to PEO Soldier. We removed the Adjutant General of the U.S. Army from Recommendation A.3 and added Recommendation A.4 to the final report. U.S. Army Central comments were not fully responsive on Recommendation A.3. PEO Soldier comments on Recommendation B.1.f were not fully responsive. Management comments on the remaining recommendations were responsive. See recommendations table on page ii.

## **Recommendations Table**

| Management   | Recommendations<br>Requiring Comment | No Additional Comments<br>Required |
|--|--------------------------------------|------------------------------------|
| Deputy Chief of Staff for<br>Logistics, Department of the<br>Army          |                                      | A.1                                |
| Commander, U.S. Army Central   | A.3                                  |                                    |
| Deputy Commanding General,<br>U.S. Army Installation<br>Management Command |                                      | A.3, B.3                           |
| Commander, TACOM Life Cycle Management Command                             |                                      | B.2                                |
| PEO Soldier  | A.1, B.1.f                           | A.2, B.1.a-e, C.1                  |
| Adjutant General of the U.S. Army  |                                      | A.4                                |
| Director, DRMS   |                                      | C.2                                |

Please provide comments by January 8, 2010.

## **Table of Contents**

| Introduction   | -                                      |
|--|--|
| Objectives Background Review of Internal Controls  |  |
| Finding A. Interceptor Body Armor Logistics Support  | 4                                      |
| Management Actions<br>Recommendations, Management Comments, and Our Response   | 13<br>13                               |
| Finding B. Inspections of Interceptor Body Armor Ballistic Plates  | 17                                     |
| Management Actions<br>Recommendations, Management Comments, and Our Response   | 24<br>24                               |
| Finding C. Disposal of Interceptor Body Armor  | 28                                     |
| Management Actions<br>Recommendations, Management Comments, and Our Response   | 33<br>33                               |
| Appendices   |  |
| <ul> <li>A. Scope and Methodology</li> <li>B. Prior Coverage</li> <li>C. Summary of Audit Results at Sites Visited</li> <li>D. Concerns with the Transport of Excess Equipment in Southwest Asia</li> <li>E. Summary of U.S. Central Command Comments and Our Response</li> </ul> Management Comments          | 35<br>38<br>39<br>40<br>43             |
| Deputy Chief of Staff for Logistics, Department of the Army U.S. Central Command and U.S. Army Central U.S. Army Installation Management Command U.S. Army TACOM Life Cycle Management Command Program Executive Officer Soldier Adjutant General of the U.S. Army Defense Reutilization and Marketing Service | 45<br>46<br>58<br>60<br>62<br>66<br>68 |

## Introduction

## **Objectives**

The overall objective of our audit was to determine whether DOD was effectively managing the operations and support phase of the acquisition process for body armor components. Specifically, we reviewed the storage, shipping, maintenance, repair, inspection, disposal, and accountability of DOD body armor components. This report is the first in a series of reports on body armor life cycle management and focuses on the U.S. Army's sustainment and disposal processes. Please refer to Appendix A for a discussion of the scope and methodology; Appendix B for prior coverage related to the audit objectives; Appendix C for a summary of audit results at the sites we visited; Appendix D for the memorandum we issued to the Director of Logistics, U.S. Central Command, regarding concerns with the transport of excess equipment in Southwest Asia; and Appendix E for a summary of the Deputy Director's comments on the memorandum and our response.

## **Background**

The Army's Interceptor Body Armor (IBA) is a modular system that consists of a vest, ballistic plates, and additional components, such as the collar and groin protector, that increase the area of ballistic coverage. The system is designed to offer increased protection to the warfighter by stopping or slowing bullets and fragments and reducing the number and severity of wounds.

In 1999, IBA consisted of the Outer Tactical Vest (OTV) and the Small Arms Protective Insert (SAPI). Subsequently, the Army made IBA improvements to add protection against an additional ballistic threat and provided options for additional components. The latest improvement to the IBA is the Improved Outer Tactical Vest (IOTV), which reduced the outer vest's bulk and weight by more than 3 pounds and added other features, such as an emergency quick-release mechanism and multiple adjustment points. Figure 1 shows the current IBA configuration, which includes the IOTV, front and back Enhanced Small Arms Protective Inserts (ESAPI), Enhanced Side Ballistic Inserts (ESBI), and Deltoid Axillary and Groin Protectors.

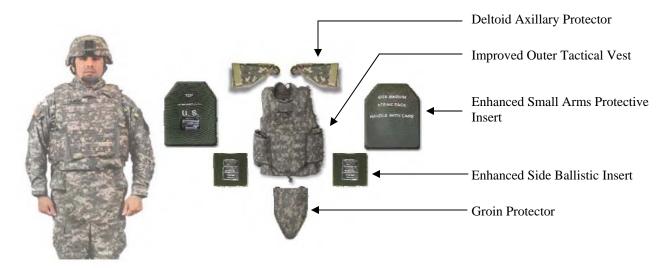


Figure 1. Interceptor Body Armor

#### Acquisition Life Cycle

DOD Directive 5000.01, "The Defense Acquisition System," May 12, 2003, provides policies and procedures for managing the five acquisition life cycle phases. The last phase, Operations and Support, has two major components—Life Cycle Sustainment and Disposal. Life Cycle Sustainment includes planning and executing logistical considerations, such as supply, maintenance, storage, and shipping throughout the system's life cycle. At the end of its useful life, when a system becomes unserviceable, it is demilitarized and disposed of in accordance with all legal and regulatory requirements and policies.

## Serviceability

The Defense Logistics Agency provides guidance to DOD Components to assist in the determination of whether equipment is serviceable or unserviceable. Serviceable equipment is considered to be new, used, repaired, or reconditioned material issuable for its intended purpose to customers with or without restrictions. Unserviceable equipment is material that is beyond the authorized capability or capacity to repair or replace at the unit and direct support level.<sup>2</sup> Material that is past its useful life or has been altered in a way that does not meet repair standards is also considered unserviceable.

## **Roles and Responsibilities**

The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) is responsible for developing Army integrated acquisition and logistics strategy policies and procedures and for maintaining oversight of execution of such policies. The Army Deputy Chief of Staff (G-4) serves as the principal military advisor to the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) in the functional area of

\_\_\_

<sup>&</sup>lt;sup>1</sup> Demilitarized is the act of destroying equipment and material to prevent further use of it for its original military purpose and applies equally to material in serviceable or unserviceable condition.

<sup>&</sup>lt;sup>2</sup> Direct support can be a distribution or maintenance activity that provides supplies and services directly to units.

Logistics and the Army Materiel Command provides acquisition, logistics, and sustainment support for the Army. To purchase and sustain material in Southwest Asia, these Army offices work closely with the Program Executive Office (PEO) Soldier, Defense Logistics Agency, Organizational Clothing and Individual Equipment (OCIE) Central Management Office (CMO), and U.S. Army Central (ARCENT).

#### **PEO Soldier**

The Army created PEO Soldier "to develop the best equipment and field it as quickly as possible." Within PEO Soldier, Project Manager-Soldier Protection and Individual Equipment is responsible for developing and fielding high-tech equipment to provide enhanced force protection including body armor, helmets, and ballistic eye protection. PEO Soldier is responsible for coordinating and maintaining the IBA logistics strategies and works with the Defense Logistics Agency for the sustainment of equipment throughout its life cycle. However, PEO Soldier retains management and oversight of the Defense Logistic Agency's sustainment of IBA.

#### OCIE CMO

At the direction of the Army Materiel Command, the U.S. Army TACOM Life Cycle Management Command established the OCIE CMO on October 1, 2006, to provide total asset visibility, enhance lifecycle management, and improve inventory management of equipment. The OCIE CMO coordinates with the U.S. Army Installation Management Command to ensure total asset visibility of equipment issued at central issuing facilities. The U.S. Army Installation Management Command is responsible for central issuing facilities that store, issue, exchange, and account for clothing and equipment. To improve inventory management, the OCIE CMO uses the Central Issuing Facility Installation Support Module, an Internet-based accountability system that provides OCIE CMO access to monitor central issuing facility inventories and shortages, thereby enhancing its ability to provide oversight and disposition instructions on excess inventories and shipping between facilities.

#### **ARCENT**

ARCENT has overall responsibility for the Army's operations in Southwest Asia. ARCENT officials provide theater resources and facilities to perform battle repair and refurbishment of combat systems. These resources include equipment issuing facilities and the Theater Retrograde, Kuwait. The Theater Retrograde acts as a theater collection point for excess equipment and is responsible for ensuring its proper reutilization or disposal.

## **Review of Internal Controls**

DOD Instruction 5010.40, "Managers Internal Control (MIC) Program Procedures," January 4, 2006, requires DOD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as

<sup>&</sup>lt;sup>3</sup> The central issuing facilities are in the process of being transferred from the U.S. Army Installation Management Command to the Army Materiel Command.

intended and to evaluate the effectiveness of the controls. We identified internal control weaknesses with the Army's IBA sustainment and disposal processes.

PEO Soldier officials did not update the IBA Logistics Supportability Strategy and supplemental documentation in accordance with Army acquisition and logistics guidance to ensure proper storage, shipping, maintenance, repair, or inspection of IBA components. Implementing the recommendations in Findings A and B should ensure that IBA guidance addresses the current IBA configuration, that IBA is appropriately maintained, and that it continues to meet the required level of ballistic protection. In addition, limitations within PEO Soldier's disposition guidance led to the disposal of potentially serviceable body armor components. Recommendations made onsite resulted in the return of 21,119 potentially serviceable IBA components worth \$7,024,083 to the Army. Recommendations in Finding C should ensure more efficient use of and better management of Federal resources.

Army officials responsible for storing, maintaining, shipping, and repairing IBA components were not consistently or properly adhering to procedures in Technical Manual 10-8400-203-23, "General Repair Procedures for Individual Equipment," August 30, 2000 (Technical Manual), or All Army Activities Message (Army Message) 109/2009, "Inspection, Maintenance and Replacement of ESAPI and ESBI Used in IOTV," April 17, 2009. Army officials also did not ensure that appropriate procedures were effectively and continuously being performed at facilities to identify, segregate, and ship ESAPI "specified for return" as stated in Army Message 292/2008. "Return of Additional Specified Lots of Enhanced Small Arms Protective Inserts (ESAPI)," December 6, 2008, and Army Message 027/2009, "Return of Specified Lots of Enhanced Small Arms Protective Inserts (ESAPI)," January 30, 2009. Implementing the recommendations in Findings A and B will improve issuing facility officials' compliance with IBA guidance and improve the identification and return of ballistic plates identified in Army Message 027/2009. Defense Reutilization Marketing Service (DRMS) officials were not in compliance with DRMS guidance to conduct proper inspections of IBA components prior to disposal. Implementing the recommendations in Finding C should result in improvements and compliance with guidance to prevent further disposal of potentially serviceable IBA. We will provide a copy of the report to senior Army and DRMS officials responsible for IBA internal controls.

\_

<sup>&</sup>lt;sup>4</sup> The Army issued guidance that requires the identification and return of specified ESAPI lot numbers.

## Finding A. Interceptor Body Armor Logistics Support

The Army should improve the management of the operations and support phase of the acquisition process for IBA. We visited 14 sites that maintained IBA and found that Army officials were not properly storing (6 sites), shipping (3 sites), and maintaining (2 sites) ESAPI. Army officials were also not properly maintaining the IBA vests (3 sites) and did not develop repair guidance for the IOTV and ESAPI. This occurred because PEO Soldier officials did not update the IBA Logistics Supportability Strategy and Technical Manual 10-8400-203-23 in accordance with Army acquisition and logistics guidance throughout the IBA life cycle. Improper storage, shipping, maintenance, or repair of ESAPI and the IOTV could reduce the life expectancy of the components or degrade their ballistic capability.

## **Army Guidance**

Army Regulation 70-1, "Army Acquisition Policy," December 31, 2003, implements DOD acquisition guidance for the life cycle management of Army materiel including individual clothing and equipment. The regulation outlines roles and responsibilities and provides guidance on the life cycle phases and required documentation associated with each phase to include the acquisition and logistics support strategies.

Army Regulation 700-127, "Integrated Logistics Support," November 10, 1999, applies to all Army materiel and assigns responsibilities for the management of equipment throughout its life cycle. As stated in the regulation, the Army uses the Integrated Logistics Support process; which includes planning, developing, acquiring, and sustaining Army materiel; to implement the mandatory acquisition and logistics procedures. Army Regulation 700-127 assigns the Integrated Logistics Support Manager responsibility for developing a supportability strategy that includes all elements of planning, developing, acquiring, and sustaining Army materiel throughout its life cycle.

The Technical Manual provides standard procedures for maintaining Army individual equipment. The Technical Manual was updated on August 30, 2000, to include Chapter 25, "Maintenance of IBA System," which provides maintenance and repair guidance for the IBA. The Army has issued additional guidance to reinforce and provide clarification of the Technical Manual. For example, the TACOM Life Cycle Management Command issued Maintenance Advisory Message (MAM 09-005), "Inspection of the Enhanced Small Arms Protective Inserts (ESAPI)/Enhanced Side Ballistic Inserts (ESBI) used on Improved Outer Tactical Vest (IOTV)," on October 31, 2008. The MAM 09-005 provides guidance on how ESAPI should be stored, cleaned, and inspected by individuals and issuing facilities. The Army also issued two Army Messages concerning body armor components—Army Message 027/2009 and Army Message 109/2009. Army Message 027/2009 requires the identification and return of specified ESAPI, and Army Message 109/2009 reiterates the storage criteria defined in MAM 09-005. Finally, the Army required each contractor to develop and provide an IOTV and OTV Use and Care Manual with each vest. The Use and Care Manuals explain how users should assemble, clean, and store the OTV, IOTV, SAPI, and ESAPI.

## **IBA Acquisition Strategy**

The Operational Requirements Document for body armor was established in 1996 and was updated in 1998 and 1999. In 1999, the Army developed the, "Logistics Supportability Strategy for Interceptor Body Armor," (Logistics Strategy), which included a requirement for 36,000 sets of IBA for dismounted soldiers. The Army began fielding the IBA in early 2000. After the attacks of September 11, 2001, the Army modified the acquisition objective in the Acquisition Strategy to ensure that all mounted and dismounted soldiers had IBA. The amount of IBA to be fielded increased from the initial 36,000 to 840,000. In 2005, the Army transitioned from SAPI to ESAPI to provide protection against an additional ballistic threat and respond to an Operational Needs Statement for side armor protection. In 2006, ESBI (the side armor protection) and Deltoid Axillary Protectors (the upper arm and underarm protection) were included in the IBA. In 2007, the Army began fielding its new vest, the IOTV, to replace the OTV and updated the IBA acquisition plan to increase the acquisition objective for IBA to 996,000.

## **IBA Logistic Requirements**

We visited 14 sites that store, ship, and maintain IBA of which 11 were body armor issuing facilities. The other 3 sites—Joint Personal Effects Depot, <sup>5</sup> Maryland; Sierra Army Depot, California; and the Theater Retrograde, Kuwait—do not issue body armor. At the 14 sites we visited, Army officials were not consistently adhering to, or had not developed adequate procedures for proper storage, shipping, maintenance, and repair of ESAPI or the IOTV. Specifically, Army officials at:

- six sites were not adhering to ESAPI storage guidance,
- three sites were not adhering to available ESAPI shipping guidance,
- three sites did not adhere to IOTV or OTV maintenance guidance, and
- two sites were unaware of maintenance guidance for ESAPI.

In addition, because the Army has not updated the Technical Manual to include guidance for repairing the IOTV and ESAPI, officials at 3 of the 11 issuing facilities were conducting repairs using OTV guidance. The other eight sites did not conduct any repairs to the IOTV. See Appendix C for a summary of audit results at the sites visited.

## Storage

Army officials were not adhering to ESAPI storage guidance at 6 of the 14 sites we visited. MAM 09-005 and Army Message 109/2009 state that it is critical that ESAPI be stored in stacks of the same size plates, strike face facedown, and no more than 10 high, to avoid damage and to maintain the plates' effectiveness. At 6 sites, ESAPI were stored without the strike face facedown and in stacks of up to 50 plates high.

-

<sup>&</sup>lt;sup>5</sup> The Joint Personal Effects Depot located at Aberdeen Proving Ground, Maryland, inventories, processes, and catalogues the personal effects of soldiers and reports to the Adjutant General of the U.S. Army through the Director, Army Casualty and Mortuary Affairs Operations Center.

IBA issuing facility officials from four of the sites (Joint Base Balad, Iraq; Camp Victory, Iraq; Fort Bliss, Texas; and the Theater Retrograde, Kuwait) were unaware of the ESAPI stacking requirement and were storing ESAPI in stacks of more than 10 plates (Figures 2 and 3). In addition, at Fort Bliss and the Theater Retrograde, the plates were not stacked with the strike face facedown. Officials from the remaining two sites, Bagram Airfield, Afghanistan, and Fort Bragg, North Carolina, stated that they were aware of the storage guidance, but were unable to comply due to storage space limitations. As a result, officials at both sites stored ESAPI in stacks of 40-50 plates (Figure 4).

Proper storage of the ESAPI is critical to avoid damage to the ballistic plates and ensuring the plates' ballistic effectiveness. PEO Soldier officials stated that storing ESAPI in stacks higher than 10 may result in too much pressure on the bottom ballistic plates, which could cause internal cracking. In addition, if the ballistic plates are stacked with the strike face faceup instead of facedown (Figures 2 and 3), the weight of the ballistic plates will not be distributed evenly. Therefore, the corners of the bottom ballistic plates could be damaged, potentially reducing the ballistic plates' effectiveness and life expectancy.



Figure 2. ESAPI Storage at Fort Bliss



Figure 3. ESAPI Storage at the Theater Retrograde



Figure 4. ESAPI Storage at Fort Bragg

### Shipping

We inspected IBA shipping containers at 3 of the 14 sites and found that ballistic plates were not properly packed for shipment in accordance with available guidance. Army units improperly packed and shipped ESAPI to the Theater Retrograde.

Theater Retrograde officials were also improperly packing and shipping ESAPI to the Sierra Army Depot.<sup>6</sup> Specifically, ESAPI and other equipment appeared to be thrown into boxes for shipment (Figure 5). Another Army unit also inappropriately packed and shipped ESAPI to Fort Bliss by stacking them 25 high with the strike face faceup (Figure 6). MAM 09-005 states that body armor contractors must pack and ship ESAPI vertically in corrugated cardboard boxes with foam inserts between each plate. After the contractors pack the box, they must place the box into another larger box for added protection. For ESAPI specified for return, Army Message 027/2009 states that Army officials shipping ESAPI specified for return should package the ballistic plates vertically in containers with reinforced cardboard and place foam inserts between each plate for added cushioning and load distribution. The message also states that Army officials should take all measures possible to ensure that the returned ESAPI are not damaged in transit. Although the Army has issued specific shipping guidance for new and specified for return ESAPI, there is no guidance for shipping used ESAPI between facilities.



Figure 5. ESAPI and SAPI Shipped to Sierra Army Depot From the **Theater Retrograde** 



Figure 6. ESAPI Shipped From an **Army Unit to Fort Bliss** 

Because issuing facility officials and Army units send equipment to other facilities, it is important to have guidance for shipping used ballistic plates. Improper shipping of the ESAPI could result in damaged ballistic plates with reduced ballistic effectiveness. Without guidance, Army officials cannot ensure that ESAPI are adequately protected in transit.

#### Maintenance

Army officials were not consistently adhering to maintenance guidance regarding the use and care of the IBA vests and ESAPI. Specifically, at 3 of the 14 sites, Army officials did not properly clean the IOTV or OTV in accordance with applicable guidance. In addition, we observed and interviewed officials at 2 of the 14 sites who were unaware of the handling guidance for ESAPI.

<sup>&</sup>lt;sup>6</sup> OCIE CMO designated Sierra Army Depot as the equipment retrograde for body armor Outside the Continental United States.

#### **IOTV and OTV Cleaning**

Army officials at 3 of the 14 sites we visited were not cleaning the IOTV or OTV in accordance with applicable guidance. Instead, Army officials were machine washing and drying the vests, which may cause deterioration and fading. The Use and Care Manual, the Technical Manual, and the vests themselves state that the IOTV and OTV must be hand washed only and may not be machine washed or dry cleaned (Figure 7). Additionally, the Use and Care Manuals and the Technical Manual further state that vests must be hand washed in lukewarm water with a mild detergent and may not be washed with yellow soap, detergent, or bleach because those cleaners may fade or deteriorate the vests.



Figure 7. Label Inside the Vest

Army officials at the Joint Personnel Effects Depot, Fort Bragg, and Camp Ali Al Salem, Kuwait, were machine washing and drying the IOTV and OTV. Officials at the Joint Personal Effects Depot and Camp Ali Al Salem stated they were unaware that the vests should be hand washed. Fort Bragg officials stated that they were aware of the hand washing requirement, but would continue to machine wash and dry the IOTV because they believe that their contractor adequately cleans the vests without damage. Because machine washing the IOTV and OTV may cause deterioration and fading (Figures 8 and 9), it is essential that IBA users comply with cleaning instructions. Improper cleaning could decrease the life expectancy of the vests and render them useless against ballistic threats.



Figure 8. Faded Vest on the Right



Figure 9. Entire Box of Faded Vests

#### Handling of the ESAPI

We interviewed soldiers on ESAPI handling procedures at 2 of the 14 sites we visited. When we asked the soldiers at Fort Benning, Georgia, and Fort Lewis, Washington, if they had been instructed not to drop the ESAPI, they stated that they had not received that instruction, and that they did not think the ballistic plates were fragile because they can stop a bullet. Yet the front of every ESAPI reads, "Handle With Care" (Figure 10). Issuing facility officials at Fort Benning stated that they provide a briefing after issuing IBA to soldiers, but do not specifically state that ESAPI should be handled with care. Issuing facility officials at Fort Lewis stated that they do not provide a briefing to soldiers.



Figure 10. Front of ESAPI

At Fort Benning, we observed soldiers tossing bags of equipment, including ESAPI, from a truck onto a cement floor. We also observed soldiers, Government civilians, and contractors dumping equipment bags containing ESAPI onto a cement floor. Improper handling of the ESAPI, such as dropping it, could damage the insert. The Army's IBA Materiel Fielding Plan, August 13, 1999, states that:

Care should be taken not to drop the SAPI. The ceramic material used in these armor plates is designed to shatter upon projectile impact; therefore, dropping them may cause cracks in the ceramic which will decrease its protective characteristics.

Although ESAPI handling procedures are not documented, PEO Soldier officials stated that the handling procedures are the same as for SAPI because ESAPI are also ceramic. If personnel continuously mishandle their ESAPI, the plate could be extensively damaged, and its ballistic capability decreased. To increase assurance that IBA is properly maintained, issuing facility officials should provide a briefing to soldiers that explains the importance of properly handling ballistic plates and reiterates the proper procedures for cleaning the IOTV and OTV.

#### Repair

Because the Army has not updated the Technical Manual to include guidance for repairing the IOTV and ESAPI, officials at 3 of the 11 issuing facilities were conducting repairs using OTV guidance. The other eight sites did not conduct any repairs to the IOTV. In addition, none of the issuing facility officials conducted repairs to the ESAPI.

The Technical Manual contains detailed guidance for repairing the OTV and SAPI. For the OTV, the Technical Manual states that a rip or tear may be machine sewn and provides detailed information on how to sew the tear depending on the location of the tear. The Technical Manual also states which stitch, needle, thread, and bobbin the repairing official should use to fix the damage, and the number of stitches per inch of damage. For SAPI, the Technical Manual states that the SAPI may be repaired if there is a small tear in the outer cover of the plate and the ceramic is not showing. SAPI repairs may be performed using adhesive and a patch made of the same outer fabric material. Although the Army issued guidance for repairing the OTV and SAPI, they have not developed or updated the guidance to include repairs for the IOTV and ESAPI.

Issuing facility officials at Bagram Airfield, Fort Lewis, and Fort Stewart, Georgia, stated that they use the OTV protocol in the Technical Manual to repair the IOTV. The repairs they conducted included replacement of IOTV parts and stitching rips or tears. However, the IOTV is structured differently than the OTV and includes more soft armor, covers a larger surface, includes side plate carriers, and has a pull cord for the emergency release of the ESAPI. The repair guidelines in the Technical Manual for the OTV do not address these differences. In addition, Army officials at Camp Victory, Fort Stewart, and Sierra Army Depot stated that the most frequent damage to the IOTV are tears in the side plate carriers. The Technical Manual does not address whether Army officials can repair the side plate carriers or the protocol for conducting these repairs. As a result, issuing facility officials could improperly repair the IOTV or not repair the IOTV at all.

Although officials at 3 sites were using OTV guidance to repair the IOTV, none of the 11 issuing facilities we visited conducted repairs to the ESAPI using SAPI guidance. One issuing facility official stated that he did not know if ESAPI could be repaired. PEO Soldier should determine whether ESAPI repairs can and should be made and if so, include the repair procedures in the Technical Manual. Including these procedures in the Technical Manual may extend the life expectancy of the components.

## **Logistics Supportability Strategy**

The Army did not update the IBA Logistics Strategy and Technical Manual in accordance with Army acquisition and logistics guidance. Army Regulation 70-1 states that the Logistics Strategy should be updated after each major program event or at a minimum of every 3 years. The Army has not updated the Logistics Strategy since 1999, even though they have made several changes to the IBA program. For example, in 2004 the Army increased the amount of IBA to be purchased from 36,000 sets to 840,000 sets (a 23.3-fold increase). We believe the increase in IBA fielding is justification for an update to the Logistics Strategy and to the Army's guidance on the proper storage, shipping, maintenance, and repair of IBA. In 2005, the Army also increased ballistic protection from SAPI to ESAPI. While we recognize that the upgrade did not require an update to the Logistics Strategy, the need for shipping and storage guidance became more essential as the weight of the ballistic plate increased by approximately 1 pound. In 2007, the Army replaced the OTV with the IOTV and further increased the amount of IBA purchased to 966,000. Although the IOTV has separate acquisition and logistics documentation, we believe the upgrade and the increase in IBA purchased were also reasons to update the IBA Logistics Strategy and Technical Manual.

Army Regulation 700-127 requires that the Logistics Strategy contain detailed information regarding equipment storage, packaging, handling, transportation, and facility requirements. The IBA Logistics Strategy states that IBA does not require special logistics consideration or special or unique packaging, storage, or handling requirements. However, the Army issued subsequent guidance such as the MAM 09-005, Army Messages 027/2009 and 109/2009, and the IOTV Use and Care Manual to address special ESAPI storage requirements, shipping guidance, and handling instructions. The Logistics Strategy also states that IBA-specific repair and maintenance information is in the Technical Manual. However, the Army has not updated the Technical Manual to address repair and maintenance protocol for the IOTV and ESAPI. To ensure proper storage, shipping, maintenance, and repair of the IBA; the Army should ensure compliance with acquisition and logistics guidance and update the Logistics Strategy and supplemental guidance to include detailed information regarding ESAPI and IOTV logistics considerations.

## **Maximizing IBA Life Expectancy**

Because the Army is not consistently adhering to or has not developed or updated storage, shipping, maintenance, and repair procedures, the Army cannot ensure that IBA is being properly maintained and may not be maximizing the life expectancy of the IBA. The Army also cannot ensure that ballistic protection is not degraded as a result of inappropriate maintenance. To ensure that the IBA can be properly maintained, the Army needs to update the Logistic Strategy and the Technical Manual and ensure awareness and compliance. Updating the guidance will provide increased assurance that the IBA is properly stored, shipped, maintained, and repaired thus improving the operations and support phase of the IBA acquisition life cycle.

### **Management Actions**

PEO Soldier has taken action to address issues identified during our audit fieldwork. For example, PEO Soldier officials stated that they are preparing an overarching IBA Supportability Strategy for the current IBA configuration with annexes specifically addressing the supportability of the vests and ballistic plates. PEO Soldier officials also stated that they plan to remove IBA from Technical Manual 10-8400-203-23 and are developing a new Technical Manual to include storage, shipping, and maintenance guidance for the current IBA configuration.

While the recommendations in this report will address the current IBA configuration, we also recognize that PEO Soldier is making continuous improvements to the IBA. As the next generation of IBA moves forward, it will be equally important that the Army continues to review and update the Logistics Strategies and supplemental documentation to ensure proper storage, shipping, maintenance, and repair. Therefore, the recommendations in this report should also be applied to future IBA configurations.

## Recommendations, Management Comments, and Our Response

Revised, Redirected, and Added Recommendations. We revised and redirected Recommendation A.1 to Program Executive Officer Soldier based on comments received from the Deputy Chief of Staff for Logistics, Department of the Army. We removed the Adjutant General of the U.S. Army from draft Recommendation A.3 and added Recommendation A.4 because Recommendation A.4 pertains only to the Adjutant General.

A.1. We recommend that Program Executive Officer Soldier coordinate with the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) and the Deputy Chief of Staff for Logistics, Department of the Army, to update and issue interim Interceptor Body Armor guidance for proper storage, shipping, and maintenance for the current configuration of body armor until Technical Manual 10-8400-203-23, "General Repair Procedures for Individual Equipment," August 30, 2000, is updated or a new Technical Manual is issued.

## Deputy Chief of Staff for Logistics Comments

The Deputy Chief of Staff for Logistics, Department of the Army, recommended that the action be redirected to the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) because PEO Soldier is under their command.

## **Our Response**

As a result of the Deputy Chief of Staff for Logistics comments, we redirected the recommendation to PEO Soldier to coordinate with both the Assistant Secretary of the Army (Acquisition, Logistics and Technology) and the Deputy Chief of Staff for Logistics to update and issue interim guidance. We request that PEO Soldier provide additional comments in response to the final report.

- A.2. We recommend that the Program Executive Officer Soldier, in coordination with the Army Deputy Chief of Staff for Logistics, the TACOM Life Cycle Management Command, Organizational Clothing and Individual Equipment Central Management Office, and the Defense Logistics Agency:
- a. Update the, "Logistics Supportability Strategy for Interceptor Body Armor," June 2, 1999, to include storage, shipping, and maintenance guidance for the current Interceptor Body Armor configuration.
- b. Submit updates to the Technical Manual 10-8400-203-23, "General Repair Procedures for Individual Equipment," August 30, 2000, or issue a new Technical Manual that includes storage, shipping, and maintenance guidance for the current Interceptor Body Armor configuration and disseminate the Technical Manual to all Army facilities.
- c. Develop repair procedures for the Improved Outer Tactical Vest and include the new procedures in the Technical Manual referenced in Recommendation A.2.b.
- d. Determine whether the Enhanced Small Arms Protective Inserts can and should be repaired and if so, include the new procedures in the Technical Manual referenced in Recommendation A.2.b.

#### **PEO Soldier Comments**

PEO Soldier agreed and stated that an IBA Supportability Strategy is being prepared, which will address the supportability of the current configuration of body armor components and the Testing Equipment. PEO Soldier also stated that IBA procedures are being removed from the current Technical Manual and a new Technical Manual is being developed for soldier protection equipment. The new Technical Manual will include storage, shipping, and maintenance guidance for the current IBA configuration and repair guidance for the OTV. Further, PEO Soldier stated that the Army determined that the ESAPI cannot be repaired. However, PEO Soldier stated that procedures for replacing the outer cover of the ESAPI are being developed, and if the Army later determines that the ESAPI can be repaired, those repair procedures will be included in the new Technical Manual.

### Our Response

PEO Soldier comments on Recommendation A.2 are responsive. Although PEO Soldier stated in their comments on Recommendation A.2.c that repair procedures are being prepared for the OTV, we contacted PEO Soldier to clarify that the comments should read "IOTV." PEO Soldier confirmed that repair procedures are being developed for the IOTV. Therefore, no additional comments are required.

- A.3. We recommend that the Commander, U.S. Army Central and the Deputy Commanding General, U.S. Army Installation Management Command:
- a. Issue guidance directing all Army sites within your command to ensure proper procedures are performed when cleaning the Improved Outer Tactical Vest and Outer Tactical Vest.
- b. Direct all Army sites within your command responsible for the storage, shipping, maintenance, and repair of Interceptor Body Armor to update or develop policies and procedures to ensure compliance with the revisions to the Technical Manual referenced in Recommendation A.2.
- c. Require a briefing at the issuing facilities prior to receipt of Interceptor Body Armor that informs soldiers of the importance of properly handling the ballistic plates and reiterates the appropriate procedures for cleaning the Improved Outer Tactical Vest and Outer Tactical Vest.

#### ARCENT Comments

The Chief of Staff, U.S. Central Command, forwarded ARCENT comments that agreed with Recommendation A.3 and stated that ARCENT is working with PEO Soldier to remedy all areas of concern discussed in this report. An ARCENT message was issued in April 2009, which provides guidance on IOTV and ESAPI inspection, cleaning, repair, and storage. Further, the IBA contract was also modified to discontinue IOTV cleaning in theater. The ARCENT Deputy Commanding General has also directed a 100-percent screening of soldiers' ballistic plates stored at the IBA warehouse in Camp Ali Al Salem, Kuwait, during rest and recuperation leave.

## **Our Response**

ARCENT comments on Recommendation A.3 are not fully responsive. For Recommendation A.3.a, the ARCENT message issued in April 2009 does not provide guidance on cleaning the Improved Outer Tactical Vest and Outer Tactical Vest. ARCENT comments also did not include specific actions planned or taken to address Recommendations A.3.b and A.3.c. Therefore, we request additional comments on Recommendation A.3 in response to the final report.

### U.S. Army Installation Management Command Comments

The Chief of Staff, U.S. Army Installation Management Command, responding for the Deputy Commanding General, agreed with the recommendation. The Chief of Staff stated that the Installation Management Command published guidance to the central issuing facilities that directed issuing facility officials to follow the IOTV hand washing procedures, as well as established guidance for IOTV cleaning contracts. The Chief of Staff also stated that within 30 days of the release of the new Technical Manual, the Installation Management Command will publish guidance directing the central issuing facilities to comply with the new Technical Manual. Finally, the Chief of Staff stated that the Installation Management Command will publish a directive requiring central issuing facility officials to add body armor cleaning procedures to soldier in-briefings.

#### Our Response

The Chief of Staff, U.S. Army Installation Management Command, comments on Recommendation A.3 are responsive. Although the Chief of Staff's comments on Recommendation A.3.c did not specify that the proper handling of ballistic plates would also be included in soldier in-briefings, we contacted a U.S. Army Installation Management Command official to ensure that the briefings would include those procedures. The U.S. Army Installation Management Command official stated that they will include the care and handling of ballistic plates in their briefings. Therefore, no additional comments are required.

A.4. We recommend that the Adjutant General of the U.S. Army issue guidance to ensure proper procedures are performed when cleaning the Improved Outer Tactical Vest and Outer Tactical Vest.

### Adjutant General of the U.S. Army Comments

The Adjutant General of the U.S. Army agreed and stated that procedures to properly hand wash body armor were immediately implemented when the DOD IG recommended changes to their body armor cleaning procedures. The Adjutant General also stated that standard operating procedures were updated to reflect the change.

### **Our Response**

The Adjutant General of the U.S. Army comments are responsive, and no additional comments are required.

## Finding B. Inspections of Interceptor Body Armor Ballistic Plates

The visual and automated inspection process for ballistic plates should be improved. Of the 11 issuing facilities we visited, officials at 8 were not adequately identifying ballistic plates with external material failures or ballistic plates specified for return in accordance with the Technical Manual, Army Message 292/2008, or Army Message 027/2009. At the eight issuing facilities, Army officials were not adequately identifying and segregating ESAPI with external material failures (six sites), identifying and segregating ESAPI specified for return (two sites), and shipping ESAPI specified for return to the correct locations (two sites). In addition, Non Destructive Test Equipment (Testing Equipment) officials in Kuwait were not x-raying deployed soldiers' ballistic plates with the Testing Equipment although senior Army officials believed they were doing so. Instead, Testing Equipment officials x-rayed only about 400 of the 60,000 ESAPI ballistic plates processed through the warehouse during a 90-day period. This occurred because

- PEO Soldier neither provided updates to the Technical Manual to include the transition from SAPI to ESAPI nor developed adequate procedures for conducting inspections on ESAPI to determine whether the ballistic plates were serviceable or unserviceable:
- PEO Soldier and issuing facility officials did not ensure that procedures were effectively and continuously being performed at facilities to identify, segregate, and ship ESAPI specified for return; and
- The Army has not determined whether x-raying ballistic plates with the Testing Equipment should be a published requirement and therefore, has not issued guidance regarding its limitations and capabilities.

As a result, deployed soldiers could be potentially engaged in combat operations with ballistic plates that have a degraded ballistic capability.

## **Inspection Requirements**

The IBA Operational Requirements Document recommended that the Army develop an inspection method to ensure the serviceability of ballistic plates. The Army developed a visual inspection requirement to detect external failures and incorporated the method in the Technical Manual. Although visual inspections are important to detect external failures, such as rips or tears; the Army needed a reliable automated inspection method to detect microscopic cracks in the ceramic plates. Between calendar year 2004 through 2007, Project Manager-Soldier Protection and Individual Equipment developed an automated inspection system as an additional method for identifying unserviceable ballistic plates. The system, with a Mobile Shelter, constitutes the Testing Equipment. The Testing Equipment uses digital x-ray technology and software to determine whether the ballistic plates have cracks or other anomalies (Figures 11 and 12).



Figure 11. Interior View of the Testing Equipment



Figure 12. Exterior View of the Testing Equipment

The Testing Equipment Draft Acquisition Strategy states that the equipment inspects ballistic plates at a rate of at least 240 per hour with an accuracy rate of 95 percent. The inspection process starts with the material handlers sorting ballistic plates by size and condition, and then inserting the ballistic plates onto the system's conveyer belt. As the ballistic plates pass through the Testing Equipment, an x-ray is taken and compared to the manufacturer's standard image to determine if there are differences. If there are cracks or other anomalies, the Testing Equipment rejects the plate and automatically offloads it into a discard bin. The material handler then places a "Requires Further Testing" label on the plate (Figure 13). For ballistic plates that pass the testing, material handlers place a "Passed Inspection" label on the plate (Figure 14). If the ballistic plates pass the testing, but have an external material failure, material handlers place an external material failure "For Training Purposes Only" label on the plate (Figure 15). An external material failure includes a rip or tear in the ESAPI outer covering.



Figure 13. Requires Further Testing Label



Figure 14. Passed Inspection Label



Figure 15. External Material Failure Label

The Army is rapidly expediting the development of the Testing Equipment and has deployed Testing Equipment systems to Camp Ali Al Salem in September 2008 and Sierra Army Depot in April 2009 for operational field tests. Current plans include approximately 14 Testing Equipment systems to be produced and fielded.

## **Visual Inspections**

The visual inspection process for ballistic plates could be improved. Of the 11 issuing facilities we visited, 8 were not adequately identifying ballistic plates with an external

material failure or ballistic plates specified for return in accordance with the Technical Manual and Army Message 027/2009. See Appendix C for a summary of audit results at the sites visited.

#### External Material Failures

Issuing facility officials were not adequately identifying and segregating ballistic plates with an external material failure at six sites. According to the Technical Manual, issuing facility officials are to inspect ballistic plates for rips, tears, and surface cracks and ensure the plate does not flex, make crunching sounds, or have loose pieces that can be heard inside the plate. If any of the aforementioned conditions exist, the ballistic plates are unserviceable. Our site visits corresponded with soldiers processing through the facility at two sites—Fort Bragg and Fort Lewis. Officials at these sites were not performing visual inspections to identify and segregate unserviceable ballistic plates before issuing them to soldiers (Figure 16).

Officials at the other four sites were not adequately identifying and segregating ballistic plates with external material failures prior to placing plates in bins, ready to be issued to soldiers. For example, Fort Bliss, Fort Stewart, and Fort Benning officials had ESAPI with rips or tears in the outer cover in bins, ready to be issued to soldiers. Although issuing facility officials stated that they would have likely re-inspected the ballistic plates prior to being issued to soldiers, we believe that the ballistic plates should have been identified and removed prior to being placed in the bin. We also identified multiple ESAPI at Camp Buehring with external material failures that had Testing Equipment Passed Inspection labels ready to be issued to soldiers (Figure 17). The issuing facility official stated that although the ballistic plates had external material failures, the plates passed the Testing Equipment inspection and therefore, were serviceable. Although the Testing Equipment will detect cracks within the ceramic plate, it will not detect external material failures, such as rips or tears in the outer cover. Therefore, issuing facility officials need to perform visual inspections on all ballistic plates, even if the plates passed the automated inspection.



Figure 16. ESAPI at Fort Bragg With an External Material Failure



Figure 17. ESAPI at the IOTV Distribution Center With an External Material Failure and a Passed Inspection Label

The Army has issued guidance for conducting visual inspections of ballistic plates to determine serviceability; however, the guidance is outdated. The Technical Manual requires issuing facility officials to conduct visual inspections on SAPI. Because the Army did not update the Technical Manual subsequent to fielding the ESAPI in 2005, the manual states, "Inspect the overall condition of the Small Arms Protective Insert (SAPI). Check for rips or tears, surface cracks in the plate itself, or if the plate flexes and crunching sounds can be heard or loose pieces can be heard inside plate when it is shaken." While we understand the SAPI and ESAPI are similar in form and the inspection criteria may be the same, the Army should update the Technical Manual to reflect the change and prevent confusion.

The Technical Manual; in addition to the IOTV Use and Care Manual, MAM 09-005, and Army Message 109/2009; does not contain clear or detailed instructions for conducting visual inspections of ballistic plates. For example, the IOTV Use and Care Manual states that a plate is unserviceable if "the outer cover is damaged, exposing the black ceramic tile material or the composite back face is delaminated and the individual fabric plies are separating." We interviewed issuing facility officials and found that they did not understand the criteria. For example, officials at Fort Bragg stated they were confused by the word "delaminated" and did not understand what to look for when inspecting for "individual fabric plies" as stated in the IOTV Use and Care Manual, MAM 09-005, and Army Message 109/2009. Although officials did understand the wording in the Technical Manual, it does not provide detailed instructions that would allow issuing facility officials to more easily detect an external material failure and determine the plate to be unserviceable. If PEO Soldier updates and clarifies the multiple visual inspection criteria, issuing facility officials may more easily detect unserviceable ballistic plates.

### Specified for Return

Issuing facility officials were not conducting visual inspections to identify ballistic plates specified for return in accordance with Army Message 292/2008 and Army Message 027/2009. Army Message 292/2008 provides instructions for returning a series of lot numbers to PEO Soldier. Army Message 027/2009 provides similar instructions, identifies additional ESAPI lot numbers, and states:

Commanders and CIFS [Central Issuing Facilities], Depots, and any other OCIE storage facilities must expeditiously take the following actions: (A) Inspect all ESAPI, including ballistic plates worn by soldiers and those in storage for the subject contracts and lot numbers. (B) Turn in all affected ballistic plates and draw replacement ballistic plates in accordance with procedures. (C) Package and ship identified ballistic plates and annotate the containers.

Army Message 027/2009 further states that the action should be completed within 30 days of receipt of the message.

Contrary to Army Messages 292/2008 and 027/2009, issuing facility officials at two sites did not adequately identify and segregate ballistic plates specified for return. The ESAPI specified for return were in bins, ready to be issued to soldiers at Fort Stewart and Camp As Sayliyah, Qatar. The specific ESAPI lot number we found at Fort Stewart was 0916-MD2 (Figure 18), which is listed in Army Message 292/2008, and the lot number we found at Camp As Sayliyah was 1150-MP2S2, which is listed in Army Message 027/2009. Officials at two additional sites did not ship ESAPI specified for return to Haymarket, Virginia, even though the shipping directions were provided in both Army Messages. The ESAPI specified for return at Fort Bliss (Figure 19) were prepared for shipment to Anniston, Alabama, and Joint Base Balad issuing facility officials stated that ballistic plates specified for return were sent to the Theater Retrograde, Kuwait. We also found ESAPI specified for return at the Camp Arifjan Defense Reutilization Marketing Office (DRMO), Kuwait, marked for disposal although it is not an issuing facility. The specific ESAPI lot number we found at the DRMO was 0976-M3D2S2 (Figure 20), which is also listed in Army Message 027/2009.



Figure 18. Specified for Return ESAPI From Fort Stewart



Figure 19. Container of Specified for Return ESAPI From Fort Bliss



Figure 20. Specified for Return ESAPI From Arifjan DRMO

Issuing facility officials did not have procedures in place to effectively and continuously identify, segregate, and ship ESAPI specified for return. Instead, issuing facility officials used various procedures at each location to identify ballistic plates specified for return, including memorizing multiple lists of ESAPI lot numbers or carrying a list of affected ESAPI lot numbers on clipboards. In addition, some issuing facility officials stated that they checked their inventory when they received the return message, but they did not continue to check for the ESAPI specified for return after the 30 days specified in the Army Message. As of July 2009, the Army identified 40.7 percent of ballistic plates specified for return from Army Message 027/2009. The low rate of return could be partially attributed to officials assuming that the message was only in effect for 30 days. This low return rate, in addition to the problems we identified with procedures at issuing facilities to identify these ballistic plates, suggests that the risk still exists that a soldier may receive a plate that may not meet the required level of protection. PEO Soldier and issuing facility officials need to ensure better coordination and put accountability mechanisms in place so facilities can more effectively and continuously identify, segregate, and ship affected ballistic plates in accordance with the Army return message.

### **Automated Inspections**

The automated inspection process for ballistic plates should be improved. Based on meetings with senior Army officials during the audit of "DoD Testing Requirements for Body Armor," January 29, 2009, we expected to find that Testing Equipment officials were collecting and x-raying 100 percent of soldiers' ballistic plates during rest and recuperation leave. Instead, we found during our April 2009 site visit to Camp Ali Al Salem that Testing Equipment officials had only conducted an exchange experiment from January through March 2009. During this experiment, soldiers on leave for emergency, rest and recuperation, or temporary duty had the option of exchanging their ESAPI for ESAPI that had passed the Testing Equipment inspection from the IBA Warehouse

contingency stock.<sup>7</sup> Because there was no requirement to x-ray soldiers' ballistic plates, Testing Equipment officials could only ask the soldiers to volunteer their ESAPI for inspection. IBA Warehouse officials stated that soldiers only exchanged about 400 of the 60,000 ESAPI ballistic plates processing through the warehouse during the 90-day period. While some soldiers volunteered to exchange their ESAPI for ballistic plates that passed Testing Equipment inspection, it was not a continuing effort nor did it encompass testing of 100 percent of soldiers' ballistic plates.

Testing Equipment officials at Camp Ali Al Salem and officials at two issuing facilities stated that they did not fully understand the limitations of the system. During our site visit to Camp Ali Al Salem, Testing Equipment officials were x-raying ballistic plates but not performing adequate visual inspections in compliance with the Technical Manual. Although they were inspecting the ballistic plates for major defects that could damage the Testing Equipment prior to inserting the plate on the conveyor belt, they did not conduct inspections for other external failures, such as rips and tears in the outer cover that would warrant the plate unserviceable. However, Testing Equipment officials did not yet have the External Material Failure For Training Purposes Only label, and as a result, we observed several ballistic plates with an external material failure receive a Passed Inspection label. In addition, during our site visit to Fort Lewis, we found ballistic plates with external material failures and Testing Equipment Passed Inspection labels in boxes received from Sierra Army Depot. Fort Lewis issuing facility officials stated that they believed that these ballistic plates did not need to be visually inspected because the plates had a Passed Inspection label and, therefore, were serviceable (Figures 21-22). Although the Testing Equipment can detect cracks and anomalies in the ceramic, issuing facility officials still must conduct a visual inspection on the ballistic plates to ensure there is not an external material failure that would render the plate unserviceable.



Figure 21. ESAPI at Fort Lewis with a Passed Inspection Label and an External Material Failure



Figure 22. ESAPI at Fort Lewis with a Passed Inspection Label and an External Material Failure

23

<sup>&</sup>lt;sup>7</sup> Contingency stock is body armor components in excess of approved levels and retained for possible unforeseen circumstances.

Although some senior Army and issuing facility officials stated that they were under the impression that the system was fully operational, the Testing Equipment system is still in the developmental phase of the acquisition life cycle, and PEO Soldier is working toward completion of required documentation, to include testing and analysis, to meet its next milestone. To prevent further confusion, PEO Soldier should issue interim guidance on the Testing Equipment systems' limitations and capabilities, including whether automated and visual inspections are required, until the acquisition strategy and supplemental documentation is approved and published.

## **Serviceability Assurance**

Both visual and automated inspection methods are critical to ensure that soldiers are not issued unserviceable ballistic plates. Visual inspections are critical because they can detect external material failures and ballistic plates specified for return. The Testing Equipment is also a critical inspection method because it can detect cracks in the ceramic that are not visible to the human eye. Having a thorough, updated, standardized, and published inspection process throughout the plate's life cycle should provide increased assurance that soldiers engaged in combat operations continue to have the required level of ballistic protection.

## **Management Actions**

The Army has taken action to address issues identified during our audit fieldwork. Specifically, ARCENT issued Fragmentary Order (FRAGO) 201820Z in June 2009 for the mandatory replacement of soldiers' ESAPI and ESBI in Kuwait during rest and recuperation leave. The FRAGO further states that to ensure serviceability of the ballistic plates, ARCENT officials will perform a 100-percent inspection and exchange of ESAPI and ESBI of soldiers transitioning through Kuwait for rest and recuperation leave, emergency leave, or any circumstances where soldiers leave and return through the IBA Warehouse starting June 17, 2009. We commend the Army for taking immediate action to require an additional mechanism for inspecting ballistic plates. In addition, PEO Soldier officials drafted a new return message for ESAPI. The message is a consolidation of previous Army messages for the return of specified ESAPI and states that the requirement to inspect and return affected ballistic plates will remain in effect until all ESAPI have been accounted for and that a separate message will be issued when the requirement is no longer in effect.

## Recommendations, Management Comments, and Our Response

**Revised Recommendation.** We revised draft Recommendation B.1.d to ensure that all of the ESAPI specified for return in All Army Activities Messages were included in the new All Army Activities Message.

#### **B.1.** We recommend that Program Executive Officer Soldier:

a. Develop a new Technical Manual or submit updates to Technical Manual 10-8400-203-23, "General Repair Procedures for Individual Equipment," August 30, 2000, using the most appropriate means, to the Deputy Chief of Staff for Logistics, Department of the Army. The Technical Manual should include specific and clear procedures for detecting external material failures for Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts. The Technical Manual should also clarify that visual inspections are required even if the ballistic plates have a Testing Equipment Passed Inspection label.

#### **PEO Soldier Comments**

PEO Soldier agreed and stated that clear procedures for identifying external material failures for ESAPI and ESBI will be included in the new Technical Manual. PEO Soldier also stated that the new Technical Manual will include guidance to clarify that visual inspections are required, even if the ballistic plates have a Passed Inspection label.

b. Submit updates to Maintenance Advisory Message 09-005, using the most appropriate means, to the TACOM Life Cycle Management Command, including specific and clear procedures for detecting external material failures for Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts.

#### PEO Soldier Comments

PEO Soldier agreed and stated that it will provide updates to the TACOM Life Cycle Management Command for Maintenance Advisory Message 09-005, which will include clear procedures for identifying external material failures on ballistic plates.

c. Clarify guidance for inspecting the Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts in the Improved Outer Tactical Vest Use and Care Manual, Maintenance Advisory Message 09-005, and All Army Activities Message 109/2009 so that they are congruent with the updates in the Technical Manual.

#### **PEO Soldier Comments**

PEO Soldier agreed and stated that it will update all ESAPI and ESBI guidance to coincide with the procedures in the new Technical Manual.

d. Provide input to Headquarters, Department of the Army, to issue an All Army Activities Message that establishes a recurring requirement to return all Enhanced Small Arms Protective Inserts specified for return that are in All Army Activities Messages.

#### **PEO Soldier Comments**

PEO Soldier agreed and stated that it will provide input to Headquarters, Department of the Army, to issue an All Army Activities Message ensuring a recurring requirement to return ballistic inserts identified for return.

e. Complete the required testing and analysis of the Non Destructive Testing Equipment and provide a recommendation to the Headquarters, Department of the Army, on whether the Army should require that ballistic plates be x-rayed. If the Department of the Army determines that use of the equipment should be a requirement, Program Executive Officer Soldier should develop guidance including the equipment's capabilities and limitations, and how often and which ballistic plates should be x-rayed.

#### **PEO Soldier Comments**

PEO Soldier agreed and stated that the Army continuously tests and evaluates the capabilities of the Testing Equipment and that PEO Soldier will make a recommendation to Headquarters, Department of the Army, to x-ray all serviceable ballistic plates with the Testing Equipment. PEO Solder also stated that if the Department of the Army decides that the use of the Testing Equipment should be a requirement, PEO Soldier will develop guidance including the equipments' capabilities and limitations, and how often and which ballistic plates should be x-rayed.

f. Develop interim guidance on the Non Destructive Testing Equipment limitations and capabilities, including whether automated and visual inspections are required, until the acquisition strategy and supplemental documentation is published and approved.

#### **PEO Soldier Comments**

PEO Soldier agreed and stated that the Army Test and Evaluation Command issued a capability and limitations report for the Testing Equipment on May 7, 2009. The report stated that the Testing Equipment is capable of evaluating serviceability of an undamaged plate at a success rate of 99.7 percent and of rejecting a damaged plate at a success rate of 99.9 percent. The limitation of the Testing Equipment is that the equipment is not configured to analyze the outer one-half inch of the ballistic plate. Further, PEO Soldier stated that their guidance to the Testing Equipment inspection teams is to use automated and visual inspections when evaluating the ballistic plates.

## Our Response

PEO Soldier comments on Recommendation B.1.a through B.1.e are responsive, and no additional comments are required. PEO Soldier comments on Recommendation B.1.f are nonresponsive. PEO Soldier did not state that interim guidance will be developed on the Testing Equipment's limitations and capabilities, or whether automated and visual inspections will be required by issuing facility officials. Although the Army issued a capability and limitations report for the Testing Equipment, the information still needs to be communicated to issuing facility officials. As discussed in Finding B, issuing facility

officials were not always conducting visual inspections on ballistic plates if they passed the automated inspection. While we acknowledge that PEO Soldier provides guidance to the Testing Equipment inspection teams, issuing facility officials also need to be aware of the visual inspection requirement whether or not the ballistic plates have a Passed Inspection label. Even though PEO Soldier stated in their response to Recommendation B.1.a that the new Technical Manual will clarify that visual inspections are always required, issuing interim guidance on the Testing Equipment's limitations and capabilities is still necessary until the manual is published. Therefore, we request additional comments on Recommendations B.1.f in response to the final report.

B.2. We recommend that Commander, TACOM Life Cycle Management Command issue the revised Maintenance Advisory Message 09-005 once the Program Executive Officer Soldier provides clarification and updates on the inspection process.

#### TACOM Life Cycle Management Command Comments

The Deputy Chief of Staff, TACOM Life Cycle Management Command, responding for the Commander, agreed and stated that once PEO Soldier provides clarification and updates to the inspection process, the TACOM Life Cycle Management Command Integrated Logistics Support Center will issue a revised Maintenance Advisory Message 09-005.

### Our Response

The Deputy Chief of Staff, TACOM Life Cycle Management Command comments are responsive, and no additional comments are required.

B.3 We recommend that the Deputy Commanding General, U.S. Army Installation Management Command, direct issuing facilities to comply with the All Army Activities Message in Recommendation B.1.d. by developing, publishing, and implementing effective procedures to consistently identify ballistic plates specified for return.

## U.S. Army Installation Management Command Comments

The Chief of Staff, U.S. Army Installation Management Command, responding for the Deputy Commanding General agreed and stated that he will direct the issuing facilities to comply with the new All Army Activities Message once released, which will establish a recurring requirement to return specified lots of ballistic plates.

## **Our Response**

The Chief of Staff, U.S. Army Installation Command, comments are responsive, and no additional comments are required.

## Finding C. Disposal of Interceptor Body Armor

DRMS officials at Central Demil Center, Anniston, Alabama (Anniston), and the DRMO, Camp Arifian, Kuwait (Arifian), disposed of potentially serviceable IBA components. This occurred because of the restrictive time frame prescribed in PEO Soldier memorandum, "Disposition Instructions for the United States Army Interceptor Body Armor (IBA) Outer Tactical Vests (OTV), Ballistic Protective Inserts, and Their Components," and "DRMS Demil Bulletin FY 08-001 for Body Armor," which allows for the destruction of potentially serviceable IBA components. The destruction of potentially serviceable IBA components also occurred because DRMS officials did not comply with DRMS Instruction 4160.14, "Operating Instructions for Disposition Management," and challenge the condition code when officials believed that the IBA components were serviceable. Revising the restrictive time frame and complying with DRMS guidance should ensure more efficient use of and improved management of Federal resources. During our Arifjan site visit on April 13, 2009, we made onsite recommendations that DRMS officials take immediate action to comply with DRMS Bulletin 08-001 to conduct inspections of IBA components and notify OCIE CMO for disposition instructions. As a result of our recommendations, DRMS officials returned 21,119 potentially serviceable IBA components to the Army from April 2009 through June 2009. Those serviceable IBA components were worth \$7,024,083.

#### **DRMS**

DRMS is a subordinate component of the Defense Logistics Agency and is responsible for the reutilization, transfer, donation, sale, and disposal of DOD excess equipment. Within DRMS, the DRMOs and Central Demil Centers are responsible for inspecting, coding, and disposing excess equipment. There are three facilities approved to inspect, code, and destroy IBA components. Anniston is the preferred site within the Continental United States approved to dispose of IBA, and Arifjan is the only site approved to destroy IBA in Southwest Asia.<sup>8</sup>

## **Disposition Guidance**

PEO Soldier and DRMS have issued guidance concerning IBA inspection, notification, and disposition. On September 7, 2007, PEO Soldier issued memorandum, "Disposition Instructions for the United States Army Interceptor Body Armor (IBA) Outer Tactical Vests (OTV), Ballistic Protective Inserts, and Their Components," to DRMS. The memorandum states that IBA components determined to be unserviceable in accordance with the Technical Manual should be destroyed. For potentially serviceable IBA components, the memorandum requests that DRMS officials coordinate with the OCIE CMO for possible redistribution. Once notified of potentially serviceable body armor, the OCIE CMO has 2 weeks to provide disposition instructions, or the IBA components will be demilitarized. The memorandum was in effect until September 2009 unless renewed or superseded. On September 12, 2007, G-4 and PEO Soldier issued a message,

28

 $<sup>^{\</sup>rm 8}$  The other DRMS facility is located in Kaiserslautern, Germany.

"Turn-in of Serviceable Interceptor Body Armor (IBA)," that directed issuing facilities, supply support activities, and units to immediately cease sending serviceable IBA components to DRMO facilities. Instead, the components should be inspected for serviceability in accordance with the Technical Manual or the applicable Use and Care Manual and only those components that are deemed unserviceable should be sent to a DRMO facility.

DRMS Instruction 4160.14, "Operating Instructions for Disposition Management," May 12, 2008, provides specific guidance on inspecting, processing, and disposing of DOD excess equipment. If the item appears to be incorrectly coded during inspection, the instruction states that DRMS officials should challenge the condition code with the generating activity and document any changes to the condition code. In addition, officials should inspect and challenge items that are in original packaging as well as unopened containers coded unserviceable. If the generating activity repeatedly turns in equipment with the incorrect code, DRMS officials also have the authority to refuse the activity's equipment.

"DRMS Demil Bulletin FY 08-001 for Body Armor," August 4, 2008, reiterates the PEO Soldier memorandum dated September 7, 2007, and provides DRMS officials with standard operating procedures for the receipt, reutilization, and disposal of body armor. The Bulletin states that DRMS officials should inspect IBA components to determine serviceability. If the components appear serviceable, a DRMS official should request disposition instructions from OCIE CMO. The OCIE CMO has 2 weeks to provide disposition instructions or if they request, 60 days to conduct a visual inspection. If the disposition instructions are not provided within the specified time frame, the DRMS official is authorized to dispose of the IBA.

### **DRMS** Facilities

We visited two DRMS facilities approved to demilitarize IBA components, Anniston and Arifjan. DRMS officials at both sites destroyed potentially serviceable IBA components, which could have been issued to soldiers for operational deployment or training.

#### **Anniston**

\_

At Anniston, we did not observe the actual inspection process; however, we verified that Anniston DRMS officials had segregated potentially serviceable IBA components for potential redistribution and unserviceable components for disposal. Anniston DRMS officials stated that once they receive IBA components, the components are inspected in accordance with DRMS Bulletin FY 08-001. Officials further stated that it is necessary to conduct inspections on all IBA components regardless of the condition code assigned because the condition code might be inaccurate. For example, IBA components could be marked with a serviceable condition code and during inspection the Anniston DRMS

<sup>&</sup>lt;sup>9</sup> The generating activity is the entity that sent the items to the DRMS with a serviceable or unserviceable condition code.

officials may determine the components to be unserviceable. Likewise, IBA components marked with an unserviceable condition code may be determined serviceable during inspection.

### **Compliance with Disposition Instructions**

Anniston DRMS officials conducted inspections on IBA components but did not challenge the condition codes provided by the generating activity when they believed the components were serviceable in accordance with DRMS guidance. DRMS Instruction 4160.14 states that officials should view items in their original package and unopened containers that were coded as unserviceable "with doubt," challenge the code with the generating activity, and document any changes to the code. Although Anniston DRMS officials segregated potentially serviceable IBA components, they did not challenge the condition code with the generating activity when they believed potentially serviceable components were marked with an unserviceable condition code. Therefore, the list of potentially serviceable IBA components sent to OCIE CMO were still marked with an unserviceable condition code. As a result, when OCIE CMO reviewed the list of components provided by Anniston DRMS officials, OCIE CMO officials believed the components were unserviceable and provided disposition instructions to destroy the components. Anniston DRMS officials also stated that they disposed of the potentially serviceable IBA components because OCIE CMO did not provide disposition instructions within the specified time frame.

### **Restrictive Time Frame in Disposition Guidance**

From May 14, 2008, through May 18, 2009, Anniston DRMS officials provided notification of potentially serviceable IBA components to the OCIE CMO on seven occasions. DRMS Bulletin 08-001 states that the OCIE CMO has 2 weeks to provide disposition instructions. At the end of this period, IBA components should be destroyed. According to Anniston DRMS officials, on two occasions the Army OCIE CMO did not reply with disposition instructions within the required time frame. Therefore, Anniston DRMS officials reported that they disposed of approximately 9,169 potentially serviceable IBA components. Of those components, 646 were SAPI and were worth approximately \$321,900. Although soldiers can no longer deploy to Southwest Asia with SAPI, U.S. Forces Command message "FORSCOM Policy on the Fielding and Management of Interceptor Body Armor," February 4, 2008, states that soldiers can use SAPI for training purposes. The availability and use of SAPI prepares the soldier for equipment use during Southwest Asia deployments and prevents any potential damage to ESAPI during training.

On the other 5 occasions, OCIE CMO officials provided disposition instructions on 34,855 potentially serviceable IBA components. Of those IBA components, OCIE CMO officials redistributed 6,809 and Anniston DRMS officials destroyed the other 28,046. According to OCIE CMO officials, the destroyed components were either obsolete or not needed. However, we reviewed the list of 28,046 destroyed components and questioned

\_

<sup>&</sup>lt;sup>10</sup> The remaining potentially serviceable IBA components were mainly subcomponents of the OTV, such as the outer shell, groin protectors, deltoid protectors, and soft ballistic panels.

the destruction of 11,074 SAPI and 30 ESAPI worth approximately \$4,279,000 and \$17,100, respectively. Revising the restrictive time frame in the Army and DRMS disposition guidance should ensure potentially serviceable IBA components are reused by the Army to the maximum extent practical and destroyed only when directed by the Army.

## Arifjan

Arifjan DRMS officials were not conducting inspections in accordance with DRMS Bulletin FY 08-001, and instead were destroying all IBA components marked with an unserviceable condition code upon receipt. We toured the disposal yard and observed a demonstration of the disposal process. During our tour, we identified 83 containers storing IBA components (Figure 23). We inspected the IBA components and found many that appeared to be serviceable, including unopened boxes of new ESAPI, ESBI, ESBI carriers (Figure 24), and plates that were specified for return<sup>11</sup> (Figure 25).



Figure 23. Tri-Walls at Arifjan



Figure 24. New ESBI and Carrier



Figure 25. ESAPI with a Lot Number Specified for Return

Although Arifjan DRMS officials acknowledged that some IBA components were still in the original packaging, they did not inspect the components as required by DRMS Bulletin FY 08-001 and DRMS Instruction 4160.14 nor did they challenge the condition code as required by DRMS Instruction 4160.14. Instead, Arifjan DRMS officials destroyed all IBA components. Arifjan DRMS officials stated that they also received multiple containers of excess IBA components, including potentially serviceable IBA components in February 2008. Arifjan DRMS officials contacted OCIE CMO to determine the disposition of the IBA components and returned approximately \$11,206,000 of IBA components for redistribution at the direction of OCIE CMO. However, Arifjan DRMS officials explained that they viewed the requirements to inspect the components and contact OCIE CMO when the components were potentially

31

<sup>&</sup>lt;sup>11</sup> Plates with specified lot numbers were designated for return in Army Message 027/2009 and should be shipped to PEO Soldier.

serviceable as a one-time request due to excess IBA components received in February 2008. Since then, all IBA components received at Arifjan have been destroyed. Based on DRMS Arifjan data, <sup>12</sup> 236,229 IBA components worth \$31,393,476, were disposed of during 2008. The destroyed components included 3,569 ESAPI, 8,119 ESBI, and 1,673 SAPI worth \$2,178,770, \$2,116,016, and \$758,967, respectively. Any of these components could have been serviceable because Arifjan DRMS officials did not conduct inspections on these IBA components. Although we do not have evidence that the components were serviceable (because all were destroyed), we are confident that some components were serviceable, based on the results of our site visit. Had Arifjan DRMS officials conducted inspections prior to disposal and contacted OCIE CMO officials for disposition instructions, the Army could have likely redistributed some of these components to soldiers for deployment or training purposes.

We made immediate onsite recommendations that Arifjan DRMS officials not destroy the 83 containers of IBA components, but to contact OCIE CMO for disposition instructions in accordance with DRMS Bulletin FY 08-001. We also recommended that Arifjan DRMS officials initiate inspections of all subsequent IBA components received and, if deemed serviceable, notify OCIE CMO officials for proper disposition. As a result of our recommendation, from April 2009 through June 2009, Arifjan DRMS officials returned 21,119 potentially serviceable IBA components worth \$7,024,083 to the Army.

## Improving IBA Accountability

PEO Soldier and DRMS guidance allows for the destruction of serviceable IBA components if the OCIE CMO official does not respond to DRMS notification within 2 weeks. We understand that establishing a time frame for notification or disposal may be important to prevent DRMS facilities from becoming storage facilities; however, the restrictive time frame in the guidance led to the destruction of serviceable IBA components. Office of Management and Budget Circular A-123, "Management's Responsibility of Internal Controls," December 21, 2004, states that Federal employees are accountable for ensuring that resources are used efficiently and effectively with minimal potential for waste and mismanagement. Revising the restrictive time frame and ensuring compliance with the guidance will help to ensure more efficient use of and better management of Federal resources.

To prevent further waste and mismanagement, the Army should also consider designating and requiring an authorized Government official to conduct a physical inspection and provide disposition instructions subsequent to DRMS officials conducting their initial inspections and notifying OCIE CMO officials. If DRMS officials identify potentially serviceable IBA components, the Government official could provide further disposition instructions, depending on the component. For example, the Government official could send the potentially serviceable ballistic plates to a Testing Equipment facility for further inspection or store the plates at a temporary facility until additional testing can be performed.

Appendix A for an explanation.

<sup>&</sup>lt;sup>12</sup> We did not assess the reliability of computer-processed data provided to us by DRMS officials. See

## **Management Actions**

Subsequent to our Arifjan site visit, PEO Soldier officials inspected and recovered an estimated 900 potentially serviceable small ESAPI. PEO Soldier officials stated that they planned to x-ray the ballistic plates with the Testing Equipment and once x-rayed, the plates could be redistributed to address the Army's shortage of small ESAPI. PEO Soldier officials also recovered additional IBA components and plan to conduct testing to determine the serviceability of those components.

DRMS officials stated that Arifjan procedures were revised as a result of our site visit. Specifically, Arifjan officials ceased destroying all ballistic plates and began shipping them, regardless of condition code, to Camp Ali Al Salem for testing, evaluation, and ultimate transfer or disposal. In addition, all other IBA components, regardless of condition code, are being held until they are inspected by PEO Soldier.

## Recommendations, Management Comments, and Our Response

- C.1. We recommend that the Program Executive Officer Soldier coordinate with the:
- a. Defense Reutilization and Marketing Service and Organizational Clothing and Individual Equipment Central Management Office to revise and reissue memorandum, "Disposition Instructions for the United States Army Interceptor Body Armor (IBA) Outer Tactical Vests (OTV), Ballistic Protective Inserts, and Their Components," September 7, 2007.
- b. Department of the Army to determine whether the applicable guidance should be published as a DOD or Army regulation.

#### **PEO Soldier Comments**

PEO Soldier agreed and stated that coordination will occur with DRMS and OCIE CMO to revise and reissue memorandum, "Disposition Instructions for the United States Army Interceptor Body Armor (IBA) Outer Tactical Vests (OTV), Ballistic Protective Inserts, and Their Components," September 7, 2007, and determine whether the guidance should be published as a regulation.

## **Our Response**

PEO Soldier are responsive, and no additional comments are required.

#### **DRMS Comments**

Although not required to comment, the Director, DRMS stated that DRMS will coordinate with the Army to revise the September 7, 2007, disposition instruction, which should incorporate statements in Finding C of this report. Specifically, the Director, DRMS, stated that the disposition instructions should include input from the Army on whether to designate an authorized Government official to conduct physical inspections

of, and provide disposition instructions for, potentially serviceable IBA components subsequent to DRMS inspection.

## **Our Response**

Although designating a Government official to conduct physical inspections and provide on-site disposition instructions would aid in identifying potentially serviceable IBA components, PEO Soldier, in close coordination with DRMS and OCIE CMO, is best suited to determine the most appropriate course of action to ensure proper disposition.

- C.2. We recommend that the Director, Defense Reutilization and Marketing Service:
- a. Update, "DRMS Demil Bulletin FY 08-001 for Body Armor," August 4, 2008, to reflect changes in the memorandum referenced in Recommendation C.1.a.
- b. Require Defense Reutilization and Marketing Offices and Central Demil Centers to comply with the Defense Reutilization and Marketing Service Instruction 4160.14, "Operating Instructions for Disposition Management," May 12, 2008, requirement to challenge the condition codes and the updated Defense Reutilization and Marketing Service Demil Bulletin referenced in C.2.a.

#### **DRMS Comments**

The Director, DRMS, agreed and stated that DRMS will revise the August 4, 2008, Demil Bulletin once DRMS receives guidance from the Army. The Director also expressed concerns about the ability of DRMO employees to determine the proper condition code of equipment that requires specialized testing. The Director asserted that DRMS will coordinate with PEO Soldier to determine whether material should be referred to PEO Soldier or processed for destruction. For nontechnical items, the Director stated that the requirements of DoD Manual 4160.21-M and DRMS Instruction 4160.14 will be stressed to the DRMS field sites, specifically regarding the challenging of condition codes if they appear to be incorrect.

## Our Response

The Director, DRMS, comments are responsive. Although we agree that DRMO employees may not be able to determine the proper condition code for items that require specialized testing, both visual and automated inspection methods are critical in determining whether a ballistic plate is serviceable. The visual inspection method is nontechnical in nature and is used to detect whether a ballistic plate has an external material failure. The automated inspection method requires the use of Testing Equipment to detect cracks in the ceramic that are not visible to the human eye. Once a DRMO employee conducts a visual inspection and determines that a ballistic plate has no external material failures, the DRMO employee could send the ballistic plate to a Testing Equipment facility for an automated inspection to determine whether the plate is serviceable. No additional comments are required.

## **Appendix A. Scope and Methodology**

We conducted this performance audit from January 2009 through September 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To accomplish our objectives, we coordinated with or interviewed officials from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics; Joint Chiefs of Staff; Army Deputy Chief of Staff for Logistics (G-4); CENTCOM; ARCENT; Multi-National Force-Iraq; Multi-National Corps-Iraq; Combined Joint Task Force 101-Afghanistan; Army Materiel Command; U.S. Army TACOM Life Cycle Management Command; U.S. Army Installation Management Command; OCIE CMO; Army Human Resources Command; PEO Soldier; Defense Logistics Agency; Defense Supply Center Philadelphia; Anniston Central Demilitarization Center; Camp Arifjan and Bagram Air Base DRMO; Defense Contracting Management Agency; and sites listed in Appendix C. We obtained and reviewed IBA-specific Military Standards; DOD directives, regulations, instructions, and manuals; Maintenance Advisory Messages; Army Messages; Fragmentary Orders; standard operating procedures; and IBA Acquisition and Logistics documentation. Additionally, we observed IBA storage, shipping, maintenance, repair, and inspection procedures and tested those procedures where applicable at the 14 sites listed in Appendix C. We also observed the receipt and reutilization of IBA at the Anniston Central Demilitarization Center and observed the demilitarization of IBA at the Camp Arifian DRMO.

We coordinated with the Army Audit Agency and DOD IG Audit, Acquisition and Contract Management and Readiness, Operations, and Support Directorate personnel who were conducting concurrent audits that involved reviewing IBA.

Although the IBA has several configurations, we limited the scope of our audit primarily to the sustainment of the IOTV and ESAPI supporting U.S. Forces in Iraq and Afghanistan. While we recognize that the IOTV is still being fielded in locations other than Iraq and Afghanistan, we considered it necessary to include the sustainment of IOTV in our fieldwork because the Iraq and Afghanistan fielding was complete. We also performed a limited review of property accountability at the sites we visited. Our decision to perform a limited review was based in part on the Army's acknowledgement that it needed better IBA property accountability. However, until the Army accounts for IBA on every soldier's individual clothing record, these actions will not be complete.

We did not assess the reliability of computer-processed data provided to us by DRMS officials in the Defense Reutilization and Marketing Automated Information System and Management Information Distribution and Access System. See Use of Computer-Processed Data for additional explanation.

## **Use of Computer-Processed Data**

To perform this audit, we conducted a limited assessment of computer-processed data used to support the disposition of potentially serviceable IBA components at DRMO Arifjan and Anniston Demil Center.

To determine the number and dollar amount of potentially serviceable IBA components that DRMO Arifjan officials disposed of in 2008 and redistributed in FY 2008 through third quarter FY 2009, we relied on data from DRMS officials at Battle Creek, Michigan (DRMS Headquarters) and Arifjan. DRMS officials from both locations generated the data from the Defense Reutilization and Marketing Automated Information System and the Management Information Distribution and Access System. The Defense Reutilization and Marketing Automated Information System is a property accounting and inventory management system designed to manage personal property through disposal. The Management Information Distribution and Access System is a single access point to the Defense Reutilization and Marketing Automated Information System inventory, which contains historical (archived) information.

We reviewed the data provided by DRMS officials and extracted ESAPI, ESBI, and SAPI components to determine the number and dollar amount of those components disposed of in 2008. We requested data on the same components, in addition to ESBI carriers, from DRMS officials to determine the number and dollar amount redistributed in FY 2008 through third quarter FY 2009. DRMS officials extracted the requested data from the Management Information Distribution and Access System and provided us the total number and cost of components redistributed. We did not conduct additional testing on the data because the extracted IBA components were disposed of or redistributed and further testing would have provided minimal value as the components can not be recovered or identified. Therefore, we included the reliability of this data as a scope limitation.

To determine the number of potentially serviceable IBA components redistributed at the direction of OCIE CMO or disposed of at Anniston from May 14, 2008, to May 18, 2009, we requested and reviewed e-mail correspondence and Excel spreadsheets of potentially serviceable IBA components from Anniston and OCIE CMO officials. We compared e-mail correspondence to determine the number of occasions OCIE CMO did not provide disposition instructions within the required time frame. We also reviewed e-mail correspondence and Excel spreadsheets provided by Anniston and OCIE CMO officials which contained the amount of IBA components disposed of or redistributed. We corroborated the data and determined that the documents provided reasonable assurance as to the total number of components redistributed by OCIE CMO or disposed of at Anniston during the time frame reviewed.

To determine the dollar amounts of potentially serviceable IBA components redistributed by OCIE CMO or disposed of at Anniston from May 14, 2008, to May 18, 2009, we modified the Excel spreadsheets by adding the unit prices to the IBA components listed.

We obtained and compared unit pricing from two DOD Web sites\* and found minor differences. Therefore, we relied on the unit pricing data to calculate the cost of potentially serviceable IBA components that were disposed of or redistributed.

While we recognize there is the potential for human and system error, we do not believe that our overall audit results are negatively impacted by the limited testing conducted to assess the reliability of DRMS data. We also provided a discussion draft of the report to DRMS and OCIE CMO officials to ensure the number and dollar amount of IBA components reutilized and disposed of were accurate and reliable. As a result, we believe the computer-processed data were adequate to support the findings and conclusions presented in this report.

-

<sup>\*</sup> The two DoD websites were Defense Logistics Information Service <a href="http://www.dlis.dla.mil/webflis/pub/pub\_search.aspx">http://www.dlis.dla.mil/webflis/pub/pub\_search.aspx</a> and Army <a href="http://lrc3.monmouth.army.mil/nsn/nsndata/index.cfm">http://lrc3.monmouth.army.mil/nsn/nsndata/index.cfm</a>.

## Appendix B. Prior Coverage

During the last 5 years, the Government Accountability Office (GAO), the Department of Defense Inspector General (DOD IG), and the Army have issued ten reports discussing body armor. Unrestricted GAO reports can be accessed over the Internet at <a href="http://www.gao.gov">http://www.gao.gov</a>. Unrestricted DOD IG reports can be accessed at <a href="http://www.dodig.mil/audit/reports">http://www.dodig.mil/audit/reports</a>. Unrestricted Army reports can be accessed from .mil and gao.gov domains over the internet at <a href="https://www.aaa.army.mil">https://www.aaa.army.mil</a>.

#### GAO

GAO Report No. GAO-09-725T, "Military and Dual-Use Technology," June 4, 2009

GAO Report No. GAO-08-644T, "Internet Sales," April 10, 2008

GAO Report No. GAO-07-662R, "Defense Logistics: Army and Marine Corps's Individual Body Armor System Issues," April 26, 2007

GAO Report No. GAO-06-943, "DOD Excess Property: Control Breakdowns Present Significant Security Risk and Continuing Waste and Inefficiency," July 25, 2006

GAO Report No. GAO-05-275, "Defense Logistics: Actions Needed to Improve the Availability of Critical Items during Current and Future Operations," April 8, 2005

#### **DOD IG**

DOD IG Report No. D-2009-047, "DOD Testing Requirements for Body Armor," January 29, 2009

DOD IG Report No. D-2008-067, "DOD Procurement Policy for Body Armor," March 31, 2008

## **Army**

Army Audit Agency Report No. A-2009-0130-FFD-0067, "Body Armor Requirements," June 8, 2009

Army Audit Agency Report No. A-2009-0086-ALA, "Body Armor Testing, Program Executive Office, Soldier," March 30, 2009

Army Audit Agency Report No. A-2004-0202-AMA, "Interceptor Body Armor," March 17, 2004

# Appendix D. Concerns with the Transport of Excess Equipment in Southwest Asia



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202–4704

AUG 2 4 2009

## MEMORANDUM FOR DIRECTOR OF LOGISITICS, U.S. CENTRAL COMMAND G4, U.S. ARMY CENTRAL

SUBJECT: Concerns with the Transport of Excess Equipment in Southwest Asia Identified During the Audit of Body Armor Acquisition Life Cycle Management (Project No. D2009-D000JA-0106.000)

In April 2009, we visited the Theater Retrograde at Camp Arifjan, Kuwait. We are concerned with the transport of excess equipment to and within the Theater Retrograde, which contributed to the destruction of potentially serviceable Interceptor Body Armor components at the Camp Arifjan Defense Reutilization and Marketing Office. We are also concerned that additional Government oversight may be needed to ensure that Theater Retrograde contractors are not fulfilling inherently governmental roles. These concerns will be compounded as Theater Retrograde officials estimate that they will receive up to 25 times the amount of equipment during the drawdown of U.S. forces and equipment from Iraq.

#### Background

The Theater Retrograde acts as a theater collection point for excess equipment and is responsible for ensuring the equipment's redistribution or disposal. The Theater Retrograde is composed of three departments: Retro Sort, the General Supply Warehouse, and the Theater Redistribution Center and employs approximately 950 contractors and 16 Military officials. Retro Sort officials and contractors are responsible for inspecting and sorting the equipment received. If the contractors determine that the equipment is serviceable and the Government official approves, they send it to the General Supply Warehouse for further inspection and potential redistribution. The General Supply Warehouse contractors are also required to inspect the equipment to ensure that it is serviceable. If the General Supply Warehouse contractors agree that the equipment is serviceable, they contact an Army Materiel Command official for disposition instructions and pack and ship the equipment to its assigned destination. If Retro Sort or General Supply Warehouse contractors deem the equipment to be unserviceable and the Government official approves, the contractors send the equipment to the Theater Redistribution Center for further inspection and then to a disposal facility for subsequent disposal.

#### Units Sending Equipment to the Theater Retrograde

During our April 2009 site visit, the Theater Redistribution Center Accountable Officer stated that approximately 95 percent of all equipment that comes into the Theater Retrograde does not have detailed shipping information. Retrograde officials believe that units are sending their excess equipment directly to the Theater Retrograde without detailed shipping information, such as the sender, type of equipment, condition code, quantity, and weight. Officials at the Theater Retrograde stated that had the equipment passed through a

We plan to issue a draft report on the subject audit in September 2009 and the final report in October 2009.

<sup>&</sup>lt;sup>2</sup> An inherently governmental function is one that, as a matter of law and policy, must be performed by federal Government employees and cannot be contracted out because it is intimately related to the public interest.

3

We appreciate your immediate action and request comments on the actions taken or to be taken by September 11, 2009. Please respond to

Paul J. Granetto

Principal Assistant Inspector General for Auditing

cc: Director of Logistics, Joint Staff
Director, CJ1/4/8, Multi-National Force-Iraq
Director of Logistics, U.S. Air Forces Central
Assistant Chief of Staff, G4, U.S. Marine Corps Forces Central Command

C4, Multi-National Corps-Iraq

Assistant Chief of Staff, Logistics and Infrastructure, U.S. Naval Forces Central Command

# **Appendix E. Summary of U.S. Central Command Comments and Our Response**

The Chief of Staff, U.S. Central Command, forwarded comments from the Deputy Director of Logistics on memorandum, "Concerns with the Transport of Excess Equipment in Southwest Asia Identified During the Audit of Body Armor Acquisition Life Cycle Management," August 24, 2009. The following is a summary of his comments and our response. See Appendix D for the memorandum and page 46 of this report for full text of the U.S. Central Command comments.

### **U.S. Central Command Comments**

The Deputy Director of Logistics stated that each of the DOD OIG's concerns listed in the memorandum were being addressed, and that U.S. Central Command officials have been implementing actions since April 2009. The Deputy Director of Logistics also added that implementing policies and procedures to ensure a timely and responsible drawdown of forces is a continuously improving process.

The Deputy Director stated that U.S. Central Command has developed multiple execution teams to assist units and bases in properly redistributing, transferring, donating, and disposing equipment to ensure that units are sending excess equipment to the Theater Retrograde with detailed shipping information and the Multi-National Corps-Iraq has published guidance to improve compliance with shipping standards and accountability. He commented that the execution teams in theater are assisting units in properly transferring equipment for disposal. Additionally, Multi-National Corps-Iraq is actively engaged in enforcing the current policies and procedures, and Multi-National Corps-Iraq personnel are continuously reassessing the retrograde processes to reduce the number of shipping containers sent to the Theater Retrograde with inadequate shipping information. The Deputy Director further stated that since April 2009, the Theater Retrograde has shown a significant reduction in the amount of serviceable and non-obsolete items found in the Defense Reutilization Management Service yard, which reflects the efforts of the execution teams in Iraq. In addition, U.S. Central Command has instituted a weekly "Offenders Report" that lists process violations for containers shipped from Iraq, which is provided to leadership. Lastly, the Defense Logistics Agency is coordinating with Multi-National Forces-Iraq and ARCENT in developing and coordinating procedures to screen equipment turned into the Defense Reutilization and Marketing Service to reduce the potential for waste.

To ensure that adequate Government oversight exists at the Theater Retrograde, the Deputy Director stated that the layout and processes at the Theater Retrograde are set up to reduce the potential for contractors performing inherently Government functions. He stated that a Government official is the only individual who can determine the disposition of property and that military personnel are providing the necessary oversight. The Deputy Director also stated that the contracting officer's representative performs daily audits on the contractor operations, and the audit results are briefed to leadership monthly.

The Deputy Director also provided an information paper, which includes how Multi-National Corps-Iraq, with ARCENT and Army Materiel Command support, will control and monitor the drawdown of excess equipment out of Iraq.

## **Our Response**

We commend Headquarters, U.S. Central Command; Multi-National Corps-Iraq; ARCENT; and the Army Materiel Command for working collaboratively and taking actions in an effort to provide a timely and responsible drawdown of forces and equipment from Iraq. During our audit of the, "Management of Operations in the Theater Retrograde, Camp Arifjan, Kuwait," (Project No. D2010-D000JA-0055.000), which we announced on October 27, 2009, we plan to work closely with those officials to assess actions taken. Specifically, we will review the processes and procedures in place at the Theater Retrograde, validate that the procedures ensure that DOD is effectively and efficiently identifying and redistributing serviceable equipment to its assigned destination, and ensure that serviceable equipment is not being sent to a disposal facility for destruction. We will also review whether DoD has adequate resources available to effectively meet current and anticipated demands during the drawdown of U.S. forces and equipment from Iraq. No additional comments are required.

## Deputy Chief of Staff for Logistics, Department of the Army Comments

DEPARTMENT OF THE ARMY OFFICE OF THE DEPUTY CHIEF OF STAFF, G-4 500 ARMY PENTAGON WASHINGTON, DC 20310-0500 DALO-SUI 0 6 NOV 2008 MEMORANDUM THRU DEPUTY CHIEF OF STAFF, G-4, 500 ARMY PENTAGON, WASHINGTON, D.C. 20310 FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL, 400 ARMY NAVY DRIVE, ARLINGTON, VA 22202 SUBJECT: Department of Defense Inspector General (DoDIG) Report on the Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor Project No. D2009-D000JA-0106.000 1. This is in response to DoDIG memorandum of 29 September 2009, which requested the Office of the Deputy Chief of Staff, G-4 review / comment on Recommendation A-1. 2. Recommendation A-1 states: "...the Deputy Chief of Staff for Logistics (DCSLOG), Department of the Army (DA), direct the Program Executive Officer Soldier to submit updates to Interceptor Body Armor guidance for proper storage, shipping, and maintenance for the current configuration and issue interim guidance until Technical Manual 10-8400-203-23, "General Repair Procedures for Individual Equipment," 30 August 2000, is updated....". 3. The recommendation should be changed to read "the Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA(ALT)) direct the Program Executive Officer Soldier (PEO Soldier) to submit updates....". The PEO-Soldier is a subordinate organization to ASA (ALT), not the Office of the Deputy Chief of Staff, G4. MICHAEL W. BROWN Encl Director of Supply

Final Report Reference

Tracking documents were omitted because of length. Copies will be provided upon request.

The recommendation was revised and redirected to PEO Soldier.

## U.S. Central Command and U.S. Army Central Comments



#### UNITED STATES CENTRAL COMMAND

OFFICE OF THE CHIEF OF STAFF 7115 SOUTH BOUNDARY BOULEVARD MACDILL AIR FORCE BASE, FLORIDA 33621-5101

5 November 2009

FOR: DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: United States Central Command Response to DODIG Draft Report "Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor" September 29, 2009 (Project No. D2009-DOOOJA-0106.000)

- Thank you for the opportunity to respond to the recommendations presented in the DODIG draft report.
- USCENTCOM provides the enclosed response to the DODIG memorandum, dated 24 August 2009 included as Appendix D in the draft DODIG report, and ARCENT concurrence with Recommendation A.3 in the draft report.

Enclosures:

TAB A: CENTCOM Response to DODIG Memo, 24 Aug 09

TAB B: ARCENT Response

Major General, U.S. Army



## UNITED STATES CENTRAL COMMAND

7115 SOUTH BOUNDARY BOULEVARD MACDILL AIR FORCE BASE, FLORIDA 33621-5101

29 October 2009

TO: PRINCIPLE ASSISTANT INSPECTOR GENERAL for AUDITING, DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: USCENTCOM response to DoDIG memorandum, "Concerns with the Transport of Excess Equipment in Southwest Asia Identified during the Audit of Body Armor Acquisition Life Cycle Management." 24 August 2009.

Ref: MEMORANDUM, Concerns with the Transport of Excess Equipment in Southwest Asia Identified during the Audit of Body Armor Acquisition Life Cycle Management." 24 August 2009.

- 1. Implementing policies and procedures to meet the Presidential mandate of a timely Responsible Drawdown of Forces while still engaged in a combat environment is a continuous improvement process. USCENTCOM seeks to refine and improve the processes and systems without encumbering units in combat while still being good stewards of tax payer dollars and resources. In response to DoDIG's requests for immediate action to ensure units are sending equipment through proper channels, are providing adequate shipping data and that the Theater Retrograde Yard has adequate Government oversight IOT prevent contractors from fulfilling inherently governmental roles, USCENTCOM assures the DoDIG that the plan is in place and in execution. Each of the stated DoDIG concerns was in fact being addressed as part of the plan and that those implementing actions have been executed since the observations were made in April 2009.
- 2. Ensure units are sending equipment through proper channels:

  Control measures and execution teams have rolled out to assist units and bases to deal with the volume of materiel and to correctly execute the 5 step process of consume, redistribute, transfer, donate and dispose within established procedures and authorities. These control measures, the Drawdown Fusion Center (DFC) at MNF-I CJ1/4/8, ARCENT Support Element-Iraq (ASE-I) embedded with MNC-I C4 staff, and Responsible Reset Task Force (R2TF) have achieved full operational capability and provide oversight and control over the executing teams which include TF 586, Mobile Redistribution Teams, Redistribution Property Assistance Teams, Base Closure Assistance Teams, and Container Repair Teams. Further, Operation Clean Sweep is in progress with the purpose to execute the draw-down of all excess commodities to support MND / Corps separate excess turn-ins NLT 01 December 2009. Enclosure 1 provides the purpose and description of these teams and operations.
- Units are providing adequate shipping data:
   The following actions were taken by MNC-I to mitigate transportation of undocumented containers:

Published Tab to Annex D of OPORD 09-02.1 to address container

accountability and shipping standards.
 TF- 586 increased size and OPTEMPO of MRTs through approved RFF 633
 Mod 1 which expanded the capability throughout IJOA.

- MNC-I leadership is actively engaged in enforcing the current MNC-I policies and procedures through the B2C2WG process. Key Boards, Bureaus, Cells, Centers, and Working Groups (B2C2WG) events include: Joint Sustainment Synchronization Board, Transition Line of Operations (LOO) Battle Update Assessments (BUA), Executive Sustainment Synchronization Boards, Commander's CPOF, and Sustainment Synchronization Working Groups. MNC-I continuously reassess the processes and systems for effectiveness and efficiency to reduce the continuous case to the Theater. systems for effectiveness and efficiency to reduce the containers sent to the Theater Retrograde Yard with inadequate shipping information.

4. The Theater Retrograde Yard has adequate Government oversight IOT prevent contractors from fulfilling inherently governmental roles:
The contractor is empowered to make recommendations but the government official is the only one who can make a determination on the disposition of property. In general, through the entire non mission essential equipment flow, there are military personnel providing the necessary oversight at key locations. Since April 2009 the Theater Retrograde Yard in Kuwait has shown a significant reduction in the amount of serviceable and non-obsolete items found in the Defense Reutilization Management Service (DRMS) yard. This reflects the efforts of the teams in Iraq and that the processes/layout at the Theater Retrograde Yard is set up to reduce the potential for contractors from performing inherently Government functions.

5. In addition the 1<sup>st</sup> Theater Sustainment Command has taken the following actions:

 a. The 593D Sustainment Brigade has instituted a weekly "Offenders Report" providing 1<sup>st</sup> TSC, 13<sup>th</sup> ESC and MNC-I leadership information on container process violations coming out of Iraq.
 b. Conducted daily audits by the COR team and regular audits by the DCMA member on the contractor operations at the Theater Retrograde Yard. The results of the audits are briefed monthly to the 593D Brigade Commander.

Finally, DLA is coordinating with MNF-I and ARCENT on developing coordinating procedures to screen material turned into the DRMS yard to reduce the potential for

SES, USAF

Deputy Director of Logistics

Encl: USCENTCOM Information Paper

#### CCJ4 INFORMATION PAPER

29 October 2009

Subject: (U) Units Sending Equipment to the Theater Retrograde Yard.

- (U) <u>Purpose</u>. To provide Department of Defense Inspector General (DoDIG) with information as to how Multi-National Corps-Iraq (MNC-I), with Army Central (ARCENT) and Army Material Command (AMC) support will control and monitor the drawdown of excess equipment out of Iraq.
- 2. (U) <u>Discussion</u>. Since March 2009, MNC-I implemented policies and procedures to meet the Presidential mandate of a timely Responsible Drawdown of Forces while still engaged in a combat environment. The processes are under continuous improvement and refinement that aims to balance between: 1) minimizing the encumbering of units and 2) a Responsible Drawdown that represents a good stewardship of tax payer dollars and resources. There are three ways units may send equipment to the Theater Retrograde Yard. Those three ways are: Redistribution Property Assistance Team (RPAT), Mobile Redistribution Team (MRT), and Supply Support Activities (SSA).
- a. (U) RPAT. RPAT personnel are assigned to the 402nd Army Forward Support Battalion (AFSB). The RPAT specifically focuses on Class VII (Major End Items) items. When units in Iraq, based on operations and current environment, determine Class VII items are Non-Mission Essential (NME) equipment, units submit a NME listing to the MNC-I C4 Supply & Services asset visibility section requesting disposition instructions. The C4 uses the NME list to fill Iraq Joint Operations Area (IJOA) requirements, the remaining NME items are provided to the ARCENT Support Element-Iraq (ASE-I) to fill CENTCOM and Department of the Army (DA) requirements. The C4 then publishes a MNC-I fragmentary orders (FRAGO) directing disposition for all the items on the unit NME listing. The unit executes the disposition instructions as directed. RPAT receives and accounts for NME based on the FRAGO then prepares and submits a Transportation Movement Request (TMR) to retrograde the NME to the Theater Retrograde Yard. RPATs redistribute NME equipment (Class VII) IAW published MNC-I disposition instruction FRAGOs. Additionally, MNC-I FRAGO 0028 outlines the RPAT process and provides required documentation standards for turn-in.
- b. (U) MRT. MRT personnel are assigned to TF 586, but designated under operational control (OPCON) to the 13th Sustainment Command (Expeditionary) (ESC). The MRT specifically focuses on commodities other than Class VII. As units identify bases for closure, the 13th ESC assigns the MRT to categorize and identify unit declared NME commodities. After the unit inventories the NME and categorize the items (serviceable and unserviceable), the MRT coordinates with the unit to prepare and submit the container's TMR for retrograde to the Theater Retrograde Yard.

- c. (U) SSA. SSA personnel are assigned to support battalions, but coordination between SSAs is performed by the 13th ESC. If units identify NME (includes Class IX excess / unserviceable recoverable items except Class VII), units turn in NME to their respective supporting SSA. Once the SSA receives the NME, the turn-in section reviews the unit documentation, review condition tags, processes turn-in into the Standard Army Retail Supply System-Level 1, which then produces a Material Release Order for final disposition. 13<sup>th</sup> ESC can direct one SSAs NME to another SSA if there is a shortage thereby preventing unnecessary movement to Kuwait. Prior to Sep 09, SSAs turned in all received NME to the Forward Redistribution Point; however, since Sep 09, SSAs turn-in NME to the Theater Retrograde Yard once directed.
- 3. (U) Control Measures: Since March 09, MNC-I initiated a number of mitigation strategies and is in the process of initially several more. The purpose of these strategies is to assist units in the correct and timely turn-in to SSAs, reduce the challenges they face in turning in their excess prior to leaving the FOB, and prevent them from sending undocumented containers directly to Kuwait.
- a. (U) ASE-I. ASE-I became fully operational in Jun 09. The ASE-I is located in the MNC-I C4 with LNOs from ARCENT, Theater Sustainment Command, DA G4, DA G8, AMC, and DLA. The key responsibilities of the ASE-I are to process dispositions and retrograde all declared NME equipment from the Iraq JOA. The ASE-I critical tasks include:
- (U) Provide a single common operating picture for all equipment within the IJOA to identify and track redeployment and retrograde.
- (U) Rapidly generate theater and HQDA disposition within 96 hours of equipment being declared NME.
- (U) Assist retrograding forces with documentation, disposition, movement and customs certification of all commodities and white equipment.
- (U) Retrograde responsibly. ASE-I synchronizes retrograde efforts and planning between multiple headquarters (MNF-I, MNC-I) and ensures ARCENT, CENTCOM, DA directives are completed in the most effective and efficient manner.
- b. (U) Base Closure Assistance Team (BCAT). As a proof of principle, initially the BCAT was an internally manned team in the MNC-I C4, augmented with additional MNC-I and MND staff subject matter experts (SME). Now with an approved request, the BCATs will consist of a total of 5 teams of 6 persons each (SME in Foreign Excess Personal Property, Material Disposition Specialist, Transportation Specialist, Real Property Engineer, and Contract Specialist Defense Contract Management Agency). The teams' distribution is 1 per MND, MNF-W, and Corps. LOGCAP is to provide SMEs in environmental and property accountability. The team purpose is to ensure orderly responsible systems at Brigade Combat Team (BCT) level. MNC-I sends a

BCAT 140-days prior to base closure/hand-over date to train, assist, and provide oversight to units in the proper procedures regarding NME commodities and equipment. Currently written, the Statement of Work allocated the funding for the additional BCATs, and expects IOC 15 Dec 09.

- c. (U) Published Orders. Since 1 Mar 09, MNC-I published 270 disposition FRAGOs dealing with NME. In addition, we have produced FRAGOs with specific guidance on equipment and container retrograde and in-transit visibility. Additionally, on 16 Oct 09 DA G4 disseminated an AMHS message referencing the classification and turn-in of items to the Defense Reutilization Management Service (DRMS). HQDA G4 directed ARCENT to designate the appropriate number of representatives to routinely visit each of the DRMS locations for material and supplies that are improperly classified as unserviceable and redirect those items accordingly for accountability and reintegration into the supply system.
- d. (U) Equipment retrograde. Each unit receives specific and detailed disposition instructions via published MNC-I FRAGOs. The coordinating instructions outline the specific actions units must do to maintain the proper equipment retrograde standard.
- e. (U) Container retrograde, blocking, bracing, and shipping documentation. In addition, MNC-I is drafting more definitive guidance, procedures, and policies by publishing a Tab to Annex D (Sustainment) to MNC-I CP 09-02 Implementation Order. This will address specific container blocking and bracing of containers, the use of RFID tags, as well as the proper container documentation requirements. This provides more detailed guidance to units to ensure NME packed in containers are done to the proper standards. This will ensure continuous velocity of the flow; while increasing efficiency and effectiveness upon receipt at the Theater Retrograde Yard
- f. (U) In-Transit Visibility (ITV). Tab to Annex D (Sustainment) to MNC-I Campaign Plan 09-02 Implementation Order. This annex dictates the use of RFID tags to have ITV throughout the process. This gives better visibility of the movement of the NME to the Theater Retrograde Yard. This will reduce and minimize unexpected retrograde containers.
- 4. (U) Government Oversight: Through the entire NME flow there are military personnel providing the necessary oversight and at key locations. The following organizations have duties and responsibilities of the military personnel that provide the over watch throughout the process. Corrective actions at unit and corps levels will significantly reduce any additional effort by government oversight that is beyond their scope of work.

- a. (U) TF 586: Headquarters is located at Joint Base Balad (JBB). The organization provides the Government oversight for the entire retrograde processing. They provide the personnel for the RPAT, MRPAT, and MRT currently employed in Iraq. Additionally, they are the personnel on the ground providing unit level assistance as necessary.
- b. (U) 402nd AFSB: Headquarters is located at JBB. The 402nd AFSB ensures that retrograde process is conducted to the standards as dictated by MNC-I theater policies and procedures.
- c. (U) MNC-I C4/MND G4s: MNC-I C4 is at Victory Base Complex and MND G4s are at each respective division location. The C4/G4 provides the oversight of BCATs employed in Iraq. The C4/G4 over-watches the BCATs to ensure coordinated assistance during the Responsible Drawdown of Forces base closure/hand-over timelines.
- d. (U) Early Indicators. Feedback from ARCENT states that since August 2009 there is a significant reduction in the amount of serviceable and obsolete items incorrectly shipped to the Theater Retrograde Yard. This reduction in shipment directly correlates to a reduction of the additional man-hours invested by Theater Retrograde Yard personnel that were witnessed by the DoDIG Inspection Team in April 2009.

#### 5. Director's Comments.

Concur that progress is an ongoing continuous process moving forward in reducing erroneous excess and waste thru efforts by all stakeholders. Believe it is in everyone's best interest to continue to monitor the pulse of the process. Regular communication between DoDIG and USCENTCOM essential to keep the focus and attention on this issue.

CLYDE'R. HOBBY

SES, DV6

Deputy Director of Logistics

#### DODIG DRAFT REPORT – DATED 29 September 2009 DODIG CODE - D2009-D000JA-0106.000

"Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor"

#### ARCENT COMMENTS TO THE DRAFT REPORT

**RECOMMENDATION 1.** (A.3.) DODIG recommends that the Commander, U.S. Army Central conduct the following: (DODIG report page 13)

- a. Issue guidance directing all Army sites to ensure proper procedures are performed when cleaning the Improved Outer Tactical Vest and Outer Vest.
- b. Direct all Army sites responsible for the storage, shipping, maintenance, and repair of Interceptor Body Armor to update or develop their policies and procedures to ensure compliance with the revisions to the Technical Manual referenced in Recommendation A 2
- c. Require a briefing at the issuing facilities prior to receipt of Interceptor Body Armor that informs soldiers of the importance of properly handling the ballistic plates and reiterates the appropriate procedures for cleaning the Improved Outer Tactical Vest and Outer Tactical Vest.

ARCENT RESPONSE: ARCENT concurs with the information contained in the DODIG report and implemented the following: 1) Published ARCENT message M09-267 Dated 141435Z Apr 09. 2) ARCENT has modified the IBA Contract to discontinue cleaning of all IOTV in Theater. 3) The DCG has directed 100% screening of Soldiers plates processing through the IBA Warehouse for Rest and Recuperation (R&R) and those Soldiers processing through Camp Beuhring for Reception Staging, Onward Movement and Integration (RSOI). ARCENT with support from Program Executive Officer (PEO) shared a common understanding by placing one of 2 Non Destructive Test Equipment (NDTE) in Camp Beuhring, and one in Afghanistan Location TBD. This NDTE is a requirement necessary to ensure the Warfighter has serviceable ballistic plates not seen to the naked eye. ESAPI plates identified by the NDTE as exhibiting cracks are removed by PEO Soldier personnel and all are sent to Aberdeen Test Center (ATC). ARCENT with the Support from PEO Soldier is working to remedy all the areas of concerns expressed by the DODIG Audit team.

Page 15

53

141435Z APR 09 FM HQS USARCENT ARIFJAN KUWAIT KUHG3H TO AMC-SWA USARCENT ARIFJAN KUWAIT KUIIG4II CJTF-101 USFOR-A MNCI HQDA//G3/G8/G4/ INFO/ CENTCOM 1TSC USARCENT UNCLASSIFIED OPER/ENDURING FREEDOM// MSGID/GENADMIN/USARCENT ARIFJAN KUWAIT KU//C4// SUBJ/USARCENT MESSAGE M09-267 PREVENTIVE MAINTENANCE CHECKS /AND SERVICE (PMCS) OF ESAPI PLATES.

- (U) The purpose of this message is to provide guidance for the PMCS of ESAP-I plates and IOTV. In order to assure that your outer tactical vest system continues to provide the protection intended, it is extremely important that you follow the maintenance instructions provided below.
   Required actions:
- 1.A. (U) Soldiers conducting combat missions must inspect inserts and IOTV before each mission using procedures in paragraph c.

1.B. (U) Soldiers operating in a Command and Control environment must inspect these inserts and IOTV quarterly using procedures in paragraph c.

- 1.C. (U) Inspection: Commanders will review the procedures for proper inspection of the ESAPI and ESBI inserts (plates) as outlined in the IOTV use and care manual and other documentation to ensure that Soldiers are following proper inspection procedures. The ESAPI/ESBI insert must be turned in if any of the following conditions are present.
- 1.C.1. (U) The outer cover is damaged exposing the black ceramic tile material.
  1.C.2. (U) The ESAPI/ESBI is cracked and you hear loose pieces rattling around when the ESAPI/ESBI is shaken.
- 1.C.3. (U) The ESAPI/ESBI plates bend or twist indicating the plate is broken.
- 1.C.4. (U) The composite back face is delaminated and the individual fabric plies are separating.
- 1.C.5. (U) If your ESAPI/ ESBI is hit by fragments, turn it in.
- (U) Replacements: Order replacements as follows: ESAPI national stock number 8480-01-520-7360 (X-SM) ESAPI national stock number 8480-01-520-7370 (SM) ESAPI national stock number 8480-01-520-7373 (MED) ESAPI national stock number 8480-01-520-7385 (LRG) ESAPI national stock number 8480-01-520-7382 (X-LRG) ESBI national stock number 8470-01-536-7227 (one size) Replacements are stocked through CIF.
- (U) Cleaning: Do not machine wash or dry. Failure to follow these instructions may render your ESAPI/ESBI useless against ballistic threats.

- 3.A. (U) Remove loose dirt and lint from the outer surface of the ESAPI/ESBI using a cloth or soft bristle brush. Never use a stiff bristle brush.
- 3.B. (U) Wet the ESAPI/ESBI in a sink or shower using warm, not hot, water.
- 3.C. (U) Apply a mild soap or detergent to the soiled areas and scrub with a cloth or soft bristle brush. Badly soiled areas may be scrubbed with GI soap. Scrub only long enough to remove soil.
- 3.D. (U) Heavy grease/ oil stains may be pre-spotted with a dry cleaning solvent and detergent mixture and scrubbed with a soft brush.
- 3.E. (U) Rinse the ESAPI/ESBI with warm water until all suds are completely gone.
- 3.F. (U) Let the insert dry by itself, away from heat or open flame.
- 3.G. (U) Storage: Proper storage of the ESAPI and ESBI by individual Soldier and at Central Issue Facilities (CIF) is critical to avoiding damage and maintaining the plate's effectiveness.

#### 3.H. Individuals:

- 3.H.1. (U) Always clean your ESAPI/ESBI thoroughly before storing.
- 3.H.2. (U) Insert the ESAPI/ESBI into the IOTV pockts in the same manner as when worn. This prevents loss of components.
- 3.H.3. (U) Store the IOTV system as flat as possible to avoid bunching of materials.
- 3.H.4. (U) It is recommended that the system be stored in a plastic bag to keep out dirt, dust and moisture.
- 3.I. (U) Interim Repairs of IOTV: The following interim repairs can be made to the IOTV until the vest can be exchanged.
- 3.J. (U) Rigger's tape can be used to fix tears or holes in the carrier, keep the vest closed, hold the ballistic panels in place, or repair any hook and pile that has been damaged.
- 3.K. (U) Thread-on buckle can be used to repair broken buckles on side straps.
- 3.L. (U) Interim Repairs of ESAPI/ESBI: The following interim repairs can be made to the ESAPI/ESBI until the vest can be exchanged.
- 3.L.1. (U) The outer cover can be repaired using rigger's tape until it can be exchanged.
- 3.L.2. (U) IF YOUR ESAPI/ESBI IS HIT BY FRAGMENTS, TURN IT IN!

UNCLASSIFIED 201820Z JUNE 09 FM USARCENT ARIFJAN KUWAIT KUIIG3/I TO USARCENT ARIFJAN KUWAIT KUIIG3/I 1ST SUSTAINMENT COMMAND (T) INFO PEO SOLDIER HQS FT BELVOIR VA AMC-SWA USARCENT ARIFJAN KUWAIT KUIIG4II 513TH MI BDE (-) 335TH THEATER SIGNAL COMMAND ASG-KU USARCENT HQS FT MCPHERSON GA/WATCH USCENTCOM USCENTAF USSOCCENT MARCENT NAVCENT MNFI MNCI USFOR-A CJTF82 HQDA//G3/G8/G4/ UNCLASSIFIED OPER/IRAQI FREEDOM//ENDURING FREEDOM// MSGID/FRAGO/USARCENT ARIFJAN KUWAIT KUI/G3//G4 SUBJ/USARCENT FRAGO 09-123, SCANNING AND INSPECTION OF ESAPI AND ESBI PLATES// REF/A/DOD IG INFO PAPER// REF/B/ALARACT: USARCENT MESSAGE M09-267 INSPECTION, MAINTENANCE, AND REPLACEMENT OF ENHANCED SMALL ARMS PROTECTIVE INSERTS (ESAPI) AND ENHANCED SIDE BALLISTIC INSERTS (ESBI) PLATES.// 1. (U) SITUATION.//

- 1. A. (U) USARCENT will perform a 100% inspection and exchange of Enhanced Small Arms Protective Inserts (ESAPI) and Enhanced Side Ballistic Inserts (ESBI) of Soldiers plates transitioning through Rest and Recuperation (R&R), emergency leaves, or any circumstances where Soldiers leave and return going through the IBAW to ensure serviceability of plates starting 17 June, 09.//
- B. (U) On or about 10-15 April, 09 a DOD IG team conducted a site survey in Kuwait for The Audit of Body Armor Acquisition Life Cycle Management. The DOD IG team identified that 100% scanning of ESAPI and ESBI plates were not being scanned.

- 1. C. (U) The Army has a new capability to ensure the inspection process of individual body armor plate serviceability. This capability is the Non-Destructive Test Equipment (NDTE) which is co-located at the Interceptor Body Armor Warehouse (IBAW) located at Ali Al Salem, Kuwait. This system is utilized to scan plates and give test result of pass or fail. I/
- 2. (U) MISSION. No change.II
- 3. (U) EXECUTION.II
- 3. A. (U) COMMANDER'S INTENT. No change.if
- 3. B. (U) CONCEPT OF OPERATIONS.//
- 3. B.1. (U) Soldiers will do a one for one exchange of ESAPI and ESBI plates during their transition through the Interceptor Body Armor Warehouse (IBAW) located at Ali Al Salem, Kuwait processing before or after R&R.//
- 3. C. (U) TASKS TO SUBORDINATE UNITS. #
- 3. C.1. (U) 1st SC (T)
- 3. C.1 A. 1st SC (T) will manage and provide command and control over the IBAW STARTING 17 June, 09. I/
- 3, C.1.B. (U) Coordinates with PEO Soldier to develop a MOA for the IBAW SOP.  ${\it II}$
- 3. D. (U) COORDINATING INSTRUCTIONS.II
- 3. D.1. (U) Plate exchange at the IBAW is mandatory for all Soldiers prior to departing or returning for R&R, emergency leave, or any circumstances where Soldiers leave and return to the AOR. Plates exchanged during this process will be on a one for one basis. II
- 3, D.2. (U) All Soldiers processing through the IBAW will bring their ESAPI and ESBI plates//
- 3. D.3. (U) DIRLAUTH is authorized.//
- 4. (U) SERVICE AND SUPPORT. No change JI
- 5. (U) COMMAND AND SIGNAL. 1st SC (T) will manage this operation.//
- 5. A. (U) POINTS OF CONTACT.//
- 5. B. (U) USARCENT G4. //

## **U.S. Army Installation Management Command Comments**



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
2511 JEFFERSON DAVIS HIGHWAY
ARLINGTON VA 22202-3926

REPLY TO ATTENTION OF

OCT 2 7 2009

MEMORANDUM FOR Department of Defense Inspector General, 400 Army Navy Drive, Arlington, Virginia 22202-4704

SUBJECT: Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor (Project No. D2009-D000JA-0106.000)

- Reference Department of Defense Inspector General (DODIG) draft report, 29 Sep 09, subject: Army's Management of the Operations and Support of Phase of the Acquisition Process for Body Armor (Project No. D2009-D000JA-0106.000).
- Installation Management Command (IMCOM) concurs with the findings and recommendations of the referenced draft report. Below are the IMCOM responses addressing each applicable finding.
- a. "Recommendation A.3. We recommend that the Commander, U.S. Army Central Command and Commander, U.S. Army Installation Management Command, and the Adjutant General of the U.S. Army:
- a. Issue guidance directing all Army sites to ensure proper procedures are performed when cleaning the Improved Outer Tactical Vest (IOTV) and Outer Tactical Vest."

Command response: concur. On 15 Oct 09, IMCOM G-4 published guidance to IMCOM central issue facilities (CIFs) directing them to follow the hand washing procedures in the IOTV Use and Care manual. In addition, we provided CIFs with guidance on establishing IOTV cleaning contracts.

"b. Direct all Army sites responsible for the storage, shipping, maintenance, and repair of Interceptor Body Armor to update or develop their policies and procedures to ensure compliance with the revisions to the Technical Manual referenced in Recommendation A.2."

Command response: concur. TM 10-8470-207-13&P, "Interceptor Body Armor," is yet to be published by PEO Soldier. Within 30 days of release of TM 10-8470-207-13&P, IMCOM will issue guidance directing CIFs to comply with the new technical manual.

"c. Require a briefing at the issuing facilities prior to receipt of Interceptor Body Armor that informs soldiers of the importance of properly handling the ballistic plates and reiterates the appropriate procedures for cleaning the Improved Outer Tactical Vest and Outer Tactical Vest."

#### IMLO-S

SUBJECT: Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor (Project No. D2009-D000JA-0106.000)

Command response: concur. On or before 6 Nov 09, IMCOM will publish a directive requiring CIFs to incorporate IOTV and ballistic plate cleaning instructions into their Soldier in-briefings.

b. "Recommendation B.3. We recommend that the Deputy Commanding General, Installation Management Command, direct issuing facilities to comply with the All Army Activities Message in Recommendation B.1.d. by developing, publishing, and implementing effective procedures to consistently identify ballistic plates specified for return."

**Command response**: This recommendation is contingent upon the release of a new DA G-4 ALARACT message establishing a recurring requirement to return specific lots of ballistic plates. Within 30 days of new message release, IMCOM will direct CIFs to comply with the message.

3. In addition, IMCOM will add these inspection areas to our Command Inspection Program checklists to ensure future compliance by CIFs.

FORREST R. NEWTON

COL, USA Chief of Staff

## U.S. Army TACOM Life Cycle Management Command Comments



## DEPARTMENT OF THE ARMY UNITED STATES ARMY TACOM LIFE CYCLE MANAGEMENT COMMAND 6501 EAST 11 MILE ROAD WARREN, MICHIGAN 48397-5000

REPLY TO ATTENTION OF:

AMSTA-CSC-J

26 October 2009

MEMORANDUM FOR Program Director, Joint and Southwest Asia Operations, Office of the Inspector General, 400 Army Navy Drive, Arlington, VA 22202-4704

SUBJECT: Department of Defense Inspector General Draft Report on the Audit of the Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor (Project No. D2009-D000JA-0106.000)

- 1. Reference memorandum, dated 29 September 2009, subject: Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor (Project No. D2009-D000JA-0106.000).
- 2. We have reviewed the subject draft report and are enclosing the official TACOM LCMC reply to report Recommendation B.2 addressed to the Commander, TACOM LCMC. We agree with the recommendation and our planned corrective action is in the enclosed reply.
- 3. The TACOM LCMC Internal Review and Audit Compliance Office will track the status of the corrective action to the recommendation and perform a follow-up review to verify that the corrective action has been completed.

Encl

as

Deputy Chief of Staff

U.S. Army TACOM Life Cycle Management Command (LCMC) Comments to DODIG Audit of Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor (Project No. D2009-D000JA-0106.000)

**Objective:** DODIG's overall objective of the audit was to determine whether DOD was effectively managing the operations and support phase of the acquisition process for body armor components.

DODIG Conclusion: DODIG found that the automated inspection process for ballistic plates should be improved. Based on meetings with senior Army officials during the audit of "DoD Testing Requirements for Body Armor," January 29, 2009, DODIG expected to find that Testing Equipment officials were collecting and x-raying 100 percent of soldiers' ballistic plates during rest and recuperation leave. Instead, DODIG found during their April 2009 site visit to Camp Ali Al Salem that Testing Equipment officials had only conducted an exchange experiment from January through March 2009. During this experiment, soldiers on leave for emergency, rest and recuperation, or temporary duty had the option of exchanging their ESAPI for an ESAPI that had passed the Testing Equipment inspection from the IBA Warehouse contingency stock. Because there was no requirement to x-ray soldiers' ballistic plates, Testing Equipment officials could only ask the soldiers to volunteer their ESAPI for inspection. IBA Warehouse officials stated that soldiers only exchanged about 400 of the 60,000 ESAPI ballistic plates processing through the warehouse during the 90-day period. While some soldiers volunteered to exchange their ESAPI for ballistic plates that passed Testing Equipment inspection, it was not a continuing effort nor did it encompass testing of 100 percent of soldiers' ballistic plates.

Although some senior Army and issuing facility officials stated that they were under the impression that the system was fully operational, the Testing Equipment system is still in the developmental phase of the acquisition life cycle, and PEO Soldier is working toward completion of required documentation, to include testing and analysis, to meet its next milestone. To prevent further confusion, PEO Soldier should issue interim guidance on the Testing Equipment systems' limitations and capabilities, including whether automated and visual inspections are required, until the acquisition strategy and supplemental documentation is approved and published.

#### **Additional Facts:**

None.

**Recommendation B.2.** DODIG recommends that Commander, TACOM Life Cycle Management Command issue the revised Maintenance Advisory Message 09-005 once the Program Executive Officer Soldier provides clarification and updates on the inspection process.

Commander, TACOM-LCMC Comment: Concur. Once the Program Executive Officer (PEO) Soldier provides clarification and updates on the inspection process, the TACOM-LCMC Integrated Logistics Support Center will issue a revised Maintenance Advisory Message 09-005. Target date for implementation is 30 days from receiving the clarification and updates from PEO Soldier.

## **Program Executive Officer Soldier Comments**



DEPARTMENT OF THE ARMY PROGRAM EXECUTIVE OFFICE SOLDIER 5901 PUTNAM ROAD, BLDG 328 FORT BELVOIR VA 22060-5422

SFAE-SDR

23 October 2009

MEMORANDUM FOR DEPARTMENT OF DEFENSE OFFICE OF THE INSPECTOR GENERAL, 400 ARMY NAVY DR, ARLINGTON, VA 22202

SUBJECT: Response to the Department of Defense Inspector General (DoD IG) Report "Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor," No. D2009-D000JA-0106.000, September 29, 2009

- Program Executive Office (PEO) Soldier appreciates the opportunity to comment on the subject report and to use the recommendations of this report to strengthen the logistical processes utilized by the PEO to produce, provide, and maintain world class body armor protection for the Soldier. This response addresses the three PEO Soldier related recommendations (A.2, B.1, and C.1) and associated findings.
- 2. Comments regarding the draft recommendations are as follows.
- a. Recommendation A.2. We recommend that the Program Executive Officer Soldier, in coordination with the Army Deputy Chief of Staff for Logistics, the TACOM Life Cycle Management Command, Organizational Clothing and Equipment Central Management Office, and the Defense Logistics Agency:
- (1) Update the, "Logistics Supportability Strategy for Interceptor Body Armor," June 2, 1999, to include storage, shipping, and maintenance guidance for the current Interceptor Body Armor configuration. (A.2.a)
- <u>PEO Soldier Response</u>: Concur. PEO Soldier is preparing an over arching Interceptor Body Armor (IBA) Supportability Strategy with annexes specifically addressing the supportability of the Outer Tactical Vest (OTV), the Improved Outer Tactical Vest (IOTV), Hard Body Armor, Soft Body Armor, and Non-Destructive Test Equipment (NDTE). The estimated completion date of the IBA supportability strategy is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.
- (2) Submit updates to the Technical Manual 10-8400-203-23, "General Repair Procedures for Individual Equipment," August 30, 2000, or issue a new Technical Manual that includes storage, shipping, and maintenance guidance for the current Interceptor Body Armor configuration and disseminate the Technical Manual to all Army facilities. (A.2.b)
- <u>PEO Soldier Response</u>: Concur. PEO Soldier is removing IBA from Technical Manual (TM) 10-8400-203-23. A new TM for Soldier Protection Equipment is in development to include storage, shipping, and maintenance guidance for the current IBA configuration. The estimated completion date of the new TM is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.
- (3) Develop repair procedures for the Improved Outer Tactical Vest and include the new procedures in the Technical Manual referenced in Recommendation A.2.b. (A.2.c)

#### SFAE-SDR

SUBJECT: Response to the Department of Defense Inspector General (DoD IG) Report "Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor," No. D2009-D000JA-0106.000, September 29, 2009

<u>PEO Soldier Response</u>: Concur. PEO Soldier is preparing a new TM to develop repair procedures for the OTV. The estimated completion date of the new TM is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.

(4) Determine whether the Enhanced Small Arms Protective Inserts can and should be repaired and if so, include the new procedures in the Technical Manual referenced in Recommendation A.2.b. (A.2.d)

<u>PEO Soldier Response</u>: Concur. The Army determined, at this time, that the ESAPI hard armor insert cannot be repaired. However, procedures are being developed to replace the spall cover that surrounds the hard armor if it becomes unserviceable. Additionally, if repair procedures are developed to repair the ESAPI hard armor insert, an update will be incorporated into the new TM.

- b. Recommendation B.1. We recommend that Program Executive Officer Soldier:
- (1) Develop a new Technical Manual or submit updates to Technical Manual 10-8400-203-23, "General Repair Procedures for Individual Equipment," August 30, 2000, using the most appropriate means, to the Deputy Chief of Staff for Logistics, Department of the Army. The Technical Manual should include specific and clear procedures for detecting external material failures for Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts. The Technical Manual should also clarify that visual inspections are required even if the ballistic plates have a Testing Equipment Passed Inspection label. (B.1.a)

<u>PEO Soldier Response</u>: Concur. A new TM 10-8400-203-23, "General Repair Procedures for Individual Equipment," August 30, 2000, for Soldier Protection Equipment is in development to provide clear procedures for detecting external material failures for Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts. The TM will also clarify that visual inspections are required even if the ballistic plates have a Testing Equipment Passed Inspection label. The estimated completion date of the new TM is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.

- (2) Submit updates to Maintenance Advisory Message 09-005, using the most appropriate means, to the TACOM Life Cycle Management Command, including specific and clear procedures for detecting external material failures for Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts. (B.1.b)
- <u>PEO Soldier Response</u>: Concur. PEO Soldier will provide the TACOM Life Cycle Management Command updates to Maintenance Advisory Message 09-005 that will include specific and clear procedures for detecting external material failures for Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts. The estimated completion date of the new updates is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.
- (3) Clarify guidance for inspecting the Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts in the Improved Outer Tactical Vest Use and Care Manual, Maintenance Advisory Message 09-005, and All Army Activities Message 109/2009 so that they are congruent with the updates in the Technical Manual. (B.1.c)

SFAE-SDR

SUBJECT: Response to the Department of Defense Inspector General (DoD IG) Report "Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor," No. D2009-D000JA-0106.000, September 29, 2009

- <u>PEO Soldier Response</u>: Concur. PEO Soldier will update Maintenance Advisory Message 09-005 and provide updates to the IOTV and Care Manual and All Army Activities Message 109/2009 to ensure the Enhanced Small Arms Protective Inserts and Enhanced Side Ballistic Inserts are congruent with the updates in the TM. The estimated completion date to provide clarifying guidance is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.
- (4) Provide input to Headquarters, Department of the Army, to issue an All Army Activities Message that establishes a recurring requirement to return ballistic plates identified in All Army Activities Message 027/2009. (B.1.d)
- <u>PEO Soldier Response</u>: Concur. PEO Soldier will provide input to Headquarters, Department of the Army, not later than 15 November 2009, to issue an All Army Activities Message to establish a recurring requirement to return ballistic plates identified in All Army Activities Message 027/2009.
- (5) Complete the required testing and analysis of the Non Destructive Testing Equipment and provide a recommendation to the Headquarters, Department of the Army, on whether the Army should require that ballistic plates be x-rayed. If the Department of the Army determines that use of the equipment should be a requirement, Program Executive Officer Soldier should develop guidance including the equipment's capabilities and limitations, and how often and which ballistic plates should be x-rayed. (B.1.e)
- <u>PEO Soldier Response</u>: Concur. The Army continuously tests and evaluates the capability of the NDTE. Currently, the NDTE is meeting mission requirements to identify cracks in the hard ballistic inserts. PEO Soldier will provide a recommendation to Headquarters, Department of the Army, that all in service ballistic plates should be x-rayed. If the Department of the Army determines that use of the equipment should be a requirement, PEO Soldier will develop guidance including the equipment's capabilities and limitations, and how often and which ballistic plates should be x-rayed.
- (6) Develop interim guidance on the Non Destructive Testing Equipment limitations and capabilities, including whether automated and visual inspections are required, until the acquisition strategy and supplemental documentation is published and approved. (B.1.f)
- PEO Soldier Response: Concur. The Army Test and Evaluation Command issued a capability and limitations report on 7 May 2009 for the NDTE. As stated in the report, the "NDTE is capable of evaluating the serviceability of undamaged ballistic plates successfully 99.7 percent of the time, and rejecting damaged ballistic plates 99.9 percent of the time." The limitation is "the NDTE is not configured to analyze the outer ½ inch of the plate." PEO Soldier guidance to the NDTE inspection teams is to use automated and visual inspection in the evaluation of the ballistic plates. Acquisition documentation for the NDTE is in progress and is expected to be completed in 4<sup>th</sup> Quarter Fiscal Year 2010.
- c. Recommendation C.1. We recommend that the Program Executive Officer Soldier coordinate with the:
- (1) Defense Reutilization and Marketing Service and Organizational Clothing and Equipment Central Management Office to revise and reissue memorandum, "Disposition

Revised

#### SFAE-SDR

SUBJECT: Response to the Department of Defense Inspector General (DoD IG) Report "Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor," No. D2009-D000JA-0106.000, September 29, 2009

Instructions for the United States Army Interceptor Body Armor (IBA) Outer Tactical Vests (OTV), Ballistic Protective Inserts, and Their Components," September 7, 2007. (C.1.a)

<u>PEO Soldier Response</u>: Concur. PEO Soldier will coordinate with the Defense Reutilization and Marketing Service and Organizational Clothing and Equipment Central Management Office to revise and reissue memorandum, "Disposition Instructions for the United States Army Interceptor Body Armor (IBA) Outer Tactical Vests (OTV), Ballistic Protective Inserts, and Their Components," September 7, 2007. The estimated completion date for the revision is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.

(2) Department of the Army to determine whether the applicable guidance should be published as a DOD or Army regulation. (C.1.b)

PEO Soldier Response: Concur. PEO Soldier will coordinate with the Defense Reutilization and Marketing Service and Organizational Clothing and Equipment Central Management Office to determine whether the applicable guidance should be published as a DoD or Army regulation. The estimated completion date for determination of applicable guidance is 2<sup>nd</sup> Quarter Fiscal Year (FY) 2010.

4. The PEO Soldier Team is focused on the protection of our deployed Soldiers, especially in Iraq and Afghanistan. We appreciate the opportunity to improve our processes for the management of our body armor products throughout its life cycle.

PETER N. FULLER Brigadier General, USA

Program Executive Officer Soldier

## **Adjutant General of the U.S. Army Comments**

Final Report Reference



DEPARTMENT OF THE ARMY U.S. ARMY HUMAN RESOURCES COMMAND 200 STOVALL STREET ALEXANDRIA VA 22331-0482

AHRC-PDC-P

MEMORANDUM FOR Program Director, Joint and Southwest Asia Operations, Department of Defense Inspector General, 400 Army Navy Dive, Arlington, Virginia 22202-4704

SUBJECT: Statement of Compliance with DoD IG's Recommendation on Body Armor Cleaning Instructions.

- On 27 August 2009, DoD IG recommended changes to current Body Armor cleaning procedures found during a routine inspection at the Joint Personal Effects Depot (JPED), Aberdeen Proving Grounds, Maryland.
- Upon receipt of the IG recommendation to hand wash body armor in lukewarm water with a mild detergent, changes were immediately implemented and Standard Operating Procedure (SOP) updated to comply (enclosed).

Encl SOP Excerpt RICHARD P. MUSTION Brigadier General, USA The Adjutant General

30 September 2009

Revised and renumbered as Recommendation A.4.

Two pages of supporting documentation were omitted because of length. Copies will be provided upon request. F. Upon completion the container is zip tied for security purposes. The shipment is than assigned and forwarded to the SCMO/Final-Inventory Area.

#### 8-6. TA-50, 782 Gear Laundering Procedures

- A. TA-50 or 782 Gear is inspected and re-inspected for biohazard, soiled, damaged or torn, prior to forwarding to Supply Area.
- B. TA-50 or 782 Gear will be cleaned for turn-in to the Supply Area for final disposition.
- C. Team members must inspect and re-inspect all pockets and pouches for unaccounted items prior to beginning cleaning. Items found must be documented on a discrepancy form.
- D. Prepare items for cleaning with the most appropriate method for its type so as not to accidently damage or otherwise alter original condition.
- E. Items that cannot be laundered due to its manufacturing guidelines are carefully, but diligently wiped down with the appropriate cleaning solutions.
- F. TA-50 will be inventoried, cleaned and returned to the original box in which it was received before being taken to supply.

### 8-7. Improved Outer Tactical Vests (IOTV) Specialty Defense Systems 7.1

- A. Do not machine wash or dry. Failure to follow these instructions may destroy the vest.
- B. Remove dirt from outer surface using a cloth or soft bristle brush.
- C. Remove all ballistic inserts and the ESAPI/ESBI from the OITV outer-shell and the component carriers. Soft ballistic inserts are cleaned only by removing lose dirt from the surface with a cloth or soft brush. Do not submerge the inserts in any liquid; do not bleach; do not machine wash; do not dry clean; do not apply solvents to the ballistic inserts. If ballistic inserts become wet, allow to air dry in a flat position away from heat sources and direct sunlight. If ballistic insert becomes saturated with liquids such as gasoline, bleach or other lubricants, turn in for replacement as soon as possible.
- D. Hand wash IOTV outer-shell and component carrier covers only in cold or warm water, with mild detergent or soap. Do not use chlorine bleach, yellow soap, cleaning fluids, or solvents that will discolor/deteriorate the item.
- E. Rinse the outer-shell and covers thoroughly in clean warm water.
- F. Air dry indoors or in shade, away from heat sources.
- G. Do not attempt to dye item or fix discolorations

#### Note:

Under no circumstances should combat boots and casual/dress shoes be placed in washer. These items will be hand washed using warm soapy water and then placed in dryer on rack. Military patches will be placed in mesh bag when laundered and dried. Berets will be hand washed to prevent shrinkage. Large rugs will be vacuumed outside of building in designated areas. White clothing will be washed separately to prevent cross coloring and bleach will used when deemed necessary.

## **Defense Reutilization and Marketing Service Comments**



DEFENSE LOGISTICS AGENCY
DEFENSE REUTILIZATION AND MARKETING SERVICE
DEFENSE LOGISTICS INFORMATION SERVICE
74 WASHINGTON AVENUE NORTH
BATTLE CREEK, MICHIGAN 49037

OCT 1 8 2009

MEMORANDUM FOR HQ DLA J-3/4

SUBJECT: Draft OlG Report, "Army's Management of the Operations and Support Phase of the Acquisition Process for Body Armor," September 29, 2009 (Project D2009-D000JA-0106.000)

The subject OIG report requested DRMS comments in response to recommendations C.1 and C. 2:

Regarding, recommendation C.1.a: DRMS will coordinate with the Army to revise memorandum "Disposition Instructions for the United States Army Interceptor Body Armor Outer Tactical Vests, Ballistic Protective Inserts, and Their Components," dated September 7, 2007. We believe the guidance should incorporate the DOD IG statements found in section C of the report, specifically, "To prevent further waste and mismanagement, the Army should also consider designating and requiring an authorized Government official to conduct a physical inspection and provide disposition instructions subsequent to DRMS officials conducting their initial inspections and notifying OCIE CMO officials. If DRMS officials identify potentially serviceable Interceptor Body Armor (IBA) components, the Government official could provide further disposition instructions, depending on the component..."

DRMS concurs with recommendation C.2a and will revise the Demil Bulletin for Body Armor once the guidance referenced in recommendation C.1 is received from the Army.

DRMS also concurs with Recommendation C.2.b. However, we stress our concern about the ability of DRMO employees to determine the proper condition code for equipment that requires specialized testing such as IBA. For IBA, we will coordinate with PEO Soldier on the criteria established in recommendation C.1. to determine which material should be referred to their office and which material should be processed for destruction. For non-technical items such as vests, we will stress to our field sites the requirements of the Defense Materiel Disposition Manual (DOD 4160.21-M) and the DRMS-I 4160.14 to challenge condition codes if they appear in error.

Juila C. Amales TWILA C. GONZALES, SES Director

Federal Recycling Program Printed Au Masse at Printe

